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STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

(110–61)

HEARINGS

BEFORE THE

COMMITTEE ON
TRANSPORTATION AND
INFRASTRUCTURE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

FIRST SESSION

JULY 17 AND JULY 19, 2007

Printed for the use of the
Committee on Transportation and Infrastructure

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July 16, 2007

SUMMARY OF SUBJECT MATTER

TO: Members of the Committee on Transportation and Infrastructure

FROM: Water Resources and Environment Staff

SUBJECT: Hearing on Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

PURPOSE OF HEARING

On Tuesday, July 17th and Thursday, July 19th, at 2:00 p.m., in Room 2167 Rayburn House Office Building, the Committee on Transportation and Infrastructure will receive testimony from the Governor of Montana, state officials, former Administrator of the Environmental Protection Agency (EPA) Carol Browner, legal scholars, scientists, and stakeholders on the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act.

BACKGROUND

This memorandum briefly summarizes the authorities of the Federal Water Pollution Control Act, commonly known as the Clean Water Act, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," including wetlands. It also focuses on the ecological role of wetlands and intermittent and ephemeral streams. It will analyze three Supreme Court (the 'Court') decisions and legislative history concerning federal jurisdiction under the Clean Water Act.

Clean Water Act Introduction

Congress enacted the Federal Water Pollution Control Act Amendments of 1972 (hereafter referred to as the 'Clean Water Act' or the 'Act') to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[1] The 1972 Amendments dramatically changed the approach of the Federal Water Pollution Control Act, which can trace its roots back to the Water Quality Act of 1948.[2] Before 1972, the Federal Water Pollution Control Act had addressed water pollution by funding state and municipal water treatment systems and by requiring the establishment of state water quality standards. This approach had been largely ineffective in controlling individual discharges of pollution due to a lack of consistent state standards, and a limit on Federal authority to only interstate and coastal waters. The 1972 Amendments aimed to address this problem by instituting a national system requiring individual permits for discharges of pollutants to the nation's waters.

Section 301 of the Clean Water Act states:

> Except as in compliance with [specific provisions of] this Act, the discharge of any pollutant by any person shall be unlawful.[3]

In essence, the discharge of any pollutant, including dredge and fill material, is unlawful, except as specifically authorized by a permit. The Clean Water Act primarily uses permit programs under Section 402 (the National Pollutant Discharge Elimination System, or "NPDES," for point source pollution) and Section 404 (dredge and fill) to achieve the goals of the Act.

While the goals of the Clean Water Act speak to the restoration and maintenance of the "Nation's waters," both Section 402 and 404 refer to discharges into "navigable waters." This phrase is defined in Section 502(7) of the Clean Water Act, as follows:

> The term "navigable waters" means the waters of the United States, including the territorial seas.

While Section 502(7) is clear that "navigable waters" means 'the waters of the United States' considerable debate has nevertheless occurred concerning what 'navigable waters' consist of – and therefore, the potential jurisdictional scope of the Act. For example, recent court rulings have questioned whether the Clean Water Act applies to isolated water bodies and wetlands that lack a direct connection to traditional navigable waters.

The debate over the meaning of 'navigable waters' is important because the definition affects the authority of the Federal government to protect water quality in a number of areas, including the Clean Water Act's point-source NPDES permit (water pollution) program under Section 402, the Act's dredge-and-fill (wetlands protection) program under Section 404, as well as the Oil Pollution Act of 1990.[4]

---

[1] 33 U.S.C. § 1251(a).

[2] *See* Water Quality Act, ch. 758, 62 Stat. 1155 (1948).

[3] 33 U.S.C. § 1311(a).

[4] 33 U.S.C. § 2701. The Oil Pollution Act has its origins in section §311 of the Clean Water Act, and accordingly, uses the same definition for "navigable waters" as contained in the Clean Water Act.

The Waters of the United States

As inferred by the definition of 'navigable waters' in the Clean Water Act, the jurisdictional scope of the Act includes a wider variety of waters, including wetlands, than 'traditionally navigable' waters.

The U.S. Army Corps of Engineers (the 'Corps'), which has primary authority over implementing the dredge-and-fill program under Section 404 of the Clean Water Act, has promulgated regulations over the years to include a wide range of waters in its regulatory definition of 'waters of the United States.' (*See below*) The most recent regulation defining 'waters of the United States' was promulgated in 1986. The EPA defines a similar range of waters as 'waters of the United States in a separate, regulatory definition.'[5]

Clean Water Act Jurisdictional Determinations

Prior to 2001 – the date of the *SWANCC* and *Rapanos* Supreme Court decisions cases discussed below – the Corps and EPA broadly interpreted the Clean Water Act's authority over waters, including wetlands.

For wetlands, the Corps relied mainly on current scientific knowledge that a wetland must have three characteristics – hydric soils,[6] hydrophytic vegetation,[7] and hydrology sufficient to cause the first two.

For other waters, the Corps and EPA interpreted questions of jurisdiction based upon the water's relation to interstate commerce, as defined in their implementation regulations. These regulations, found at 40 CFR 122.2 (EPA) and 33 CFR 328(a) (Corps), define the scope of the waters of the United States to mean:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

---

[5] 40 U.S.C. § 122.2 and § 232.2

[6] The Natural Resources Conservation Service defines 'hydric soils' as "soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part." (http://soils.usda.gov/use/hydric/intro.html (accessed 16 July, 2007))

[7] The Natural Resources Conservation Service defines 'hydrophytic vegetation' as "plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content." (http://soils.usda.gov/use/hydric/criteria.html (accessed 16 July, 2007))

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

In 2001, the Supreme Court issued its ruling in *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (discussed, in depth, later in this memo), that called into question Federal authority under the Clean Water Act to protect certain waters, including wetlands. In the discussion of this decision, the Court questioned whether the term "navigable," used in the Clean Water Act, implied a jurisdictional nexus between Federal authority and traditionally-navigable waters.

In the subsequent *Rapanos* decision, the Court attempted to create a legal test for determining Federal authority, based upon the Court's notion of an implied connection to navigable waters. Unfortunately, a majority of Justices could not agree on a single test to apply, but instead recommended several, distinct tests that would assert jurisdiction based on the ability of a waterbody to be used for navigation, or on a case-by-case "significant nexus" test that requires a "significant" connection between the waterbody and a traditionally navigable water.

Accordingly, these two Supreme Court decisions have substantially altered the analysis that had been used by the Corps and EPA for decades for asserting Federal jurisdiction over U.S. waters, including wetlands, by requiring a connection to traditionally-navigable waters that did not exist prior to 2001. As a result, certain waterbodies, including certain wetlands, are either no longer protected, or will have a high-burden to prove that they are protected, by the Federal Clean Water Act. For example, geographically isolated waters and related wetlands, may be excluded under this new analysis, despite the fact that such waters help protect local water quality, reduce regional flooding, and provide significant habitat for fish and wildlife.

Wetlands

Wetlands are transition areas between aquatic ecosystems and uplands (lands that are normally dry.) Wetlands are also characterized by periodic saturated or inundated soil conditions, as well as plants that can grow in saturated soil conditions.

Historically, wetlands were often destroyed because they were viewed as waste land, or as breeding grounds for disease. However, with increasing understandings of hydrology and ecology, wetlands are now viewed by many scientists and policy-makers as serving important ecological functions, and also having environmental and economic connections.

As waters flow across watersheds through wetlands, wetlands are able to filter or otherwise remove, through natural processes that assimilate pollution, particles and chemicals present in the waters that otherwise would contaminate surface waterways. When heavy rain falls and snowpack melts, wetlands store and slow the release of floodwaters, thereby reducing potential damage to communities and infrastructure downstream. Because wetlands slow and absorb waters moving either downstream or over land they can serve an erosion control function. Wetlands can also recharge groundwater aquifers and sustain the yield of water for human use, as well as provide dry-season flows to rivers and streams.

Many plants and animals depend upon wetlands for habitat. In addition to providing commercial and recreational enterprises with jobs and income for thousands of communities in the United States, wetlands also help to maintain biodiversity. Three-quarters of the country's commercial fish and shellfish, which provide approximately $2 billion of revenue annually, are dependent upon coastal bays and their wetlands for some portion of their life-cycle.[8] Trees that grow in the forested swamps of the southeastern United States are harvested for timber. Ducks, geese, and other migratory birds in all flyways use wetlands for feeding, nesting, and resting during migration.

Because the role and function of wetlands was poorly understood in the past, more than one-half of the wetlands that were in existence throughout the coterminous United States at the time of European settlement no longer exist.[9] The distribution of wetland losses throughout the States is not uniform,[10] in some States and many watersheds, less than 10 percent of the original acreage still exists.[11]

In addition to their inherent value for flood protection and habitat, "[w]etlands are included as waters of the United States for the purposes of the Clean Water Act because it is recognized that some wetlands may improve water quality through nutrient cycling and sediment trapping and retention."[12] The goals of the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation's waters "cannot be achieved if wetlands are not protected."[13] This was recognized in the nation's "no net loss of wetlands" policy enacted by the first Bush administration,[14] and carried forth through subsequent administrations.

In recognition of these losses, as well as the importance of wetlands in achieving the goals of the Clean Water Act (*see below*), the U.S. Army Corps of Engineers (Corps) signed a Memorandum of Agreement with the U.S. Environmental Protection Agency (EPA) in 1990 outlining the position of the first Bush administration to "achieve a goal of no overall net loss of [wetland] values and functions." From that time on, both Republican and Democratic administrations have defended this goal of "no net loss" as a tool for implementing the broader goals of the Clean Water Act.

Although the rate of loss has dramatically decreased in recent years, the United States continues to lose thousands of acres of natural wetlands every year. Various types of economic activities result in some wetlands continuing to be drained, filled, and eliminated, despite the "no net loss" policy.[15] Mitigation, such as through wetland restoration, enhancement, or creation, is typically required to compensate for wetlands losses.

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[8] U.S. EPA and USDA. 1998. "Clean Water Action Plan." (February)

[9] Dahl, T.E. 1990. "Wetlands Losses in the United States 1780s to 1980s." U.S. Department of the Interior, Fish and Wildlife Service.

[10] Ten states have lost 70 percent or more of their wetland acreage, and 22 states have lost more than 50 percent. Only three states – Alaska, New Hampshire, and Hawaii – have lost less than 20 percent of their original wetlands. (Dahl, T.E. 1990. "Wetlands Losses in the United States 1780s to 1980s." U.S. Department of the Interior, Fish and Wildlife Service.)

[11] U.S. EPA and USDA. 1998. "Clean Water Action Plan." (February)

[12] National Research Council. 2001. *Compensating for Wetland Losses under the Clean Water Act*. National Academy Press. 11.

[13] National Research Council. 2001. *Compensating for Wetland Losses under the Clean Water Act*. National Academy Press. 11.

[14] Memorandum of Agreement between EPA and the Corps concerning the determination of mitigation under the CWA §404(b)(1) *Guidelines* (1990), Pt. II.C.

Intermittent and Ephemeral Streams

All downstream lakes and rivers begin as headwater streams. These consist of small streams and wetlands whose waters flow above and below ground to ultimately join to create larger water bodies. These are often very small and may not appear on topographic maps. Disruption of these small water bodies may have a demonstrable impact on the larger water body downstream.

Among the various types of streams that comprise headwaters are intermittent and ephemeral streams. Intermittent streams are those that flow for several months a year. Ephemeral streams are those that flow at the surface only periodically, usually after a heavy rainstorm.

Intermittent and ephemeral streams provide several key ecological benefits. These streams play an important role in protecting water quality by filtering and processing pollutants when water is present. In addition, when water is present in them they recharge groundwater and supplement drinking water sources for much of the nation. By absorbing rainwater, runoff, and snowmelt, these streams provide natural flood control. They trap excess sediment, therefore keeping down water purification costs for users, as well as reducing the need for dredging downstream. When water is present in them, these streams provide habitat and encourage biological diversity, as some plants and animals are only found in such waters.

In terms of stream miles, intermittent and ephemeral streams comprise the majority of the nation's stream network. Accordingly, activities affecting these waters have a potentially significant impact on the overall water quality of the nation. The Corps and EPA, have, through their regulations, interpreted the Clean Water Act to include the protection of headwater streams. Both the Corps and EPA regulations[16] define 'streams' so as to include intermittent streams.

In addition, EPA reports that out of 43,507 total NPDES permits (e.g. point sources), nationwide, at least one-third (14,751 permits) are located on headwater streams.[17] EPA classifies headwaters streams in its analysis as including a variety of waters including intermittent, ephemeral, start reaches, and perennial streams.[18] Because these headwaters consists of a variety of stream types, point sources discharging into these waters may have to undergo 'significant nexus' tests to determine if they fall under the jurisdiction of the Clean Water Act. See Appendix for breakdowns by state. As many of these streams are intermittent, many would see limited or no flow during much of the year if it were not for the effluent flow discharged from the permitted point source.

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[15] Dahl, T.E. 2006. "Status and Trends of Wetlands in the Coterminous United States, 1998 to 2004." U.S. Department of the Interior, Fish and Wildlife Service; *See also*, U.S. EPA. 2002. "National Water Quality Inventory: 2000 Report." (September)

[16] 33 CFR § 328.3 (a); [16] 40 CFR § 232.2

[17] Of all 43,507 total NPDES Individual permits, 85% have location data that allows EPA to determine whether they are located on headwater streams or not. As a result, over 14,751 NPDES Individual permits could be located on headwaters.

[18] "The [National Hydrography Dataset] characterizes stream reaches on flow characteristics such as perennial and intermittent/ephemeral, and "start reaches." We believe that the intermittent/ephemeral and "start" reach categories of water features provide the best available surrogate for providing a conservative estimate of the extent of "non-navigable" waters in the U.S. These categories are not mutually exclusive, i.e., a particular water can be both intermittent/ephemeral and a start reach. Start reaches may be navigable, but are not likely to be so. Similarly, the analysis assumes that intermittent-ephemeral waters are likely not navigable...In any event, "non-navigable" by itself is not determinative of jurisdiction." (EPA FOIA No. HQ-RIN-00684-07 (May 18, 2007))

Clean Water Act

Section 402 Program

The Clean Water Act permitting program is comprised of two major components – authority to address the discharge of pollutants from point sources through section 402, and authority to regulate the discharge of dredged or fill material through section 404.

The Clean Water Act imposes technology-based discharge control requirements on industrial and municipal dischargers through the 402 program. Industries must meet various standards based on the type of pollutant discharged and the type and age of the facility (*e.g.*, "best available technology economically achievable"). For municipalities, secondary treatment (defined in regulation as an 85 percent reduction in certain conventional pollutant concentrations as well as maintaining pH levels within a certain range) must be achieved. Additional limitations may also be imposed on dischargers through their NPDES permits where pollution levels in receiving waters continue to exceed water quality standards. This is accomplished through water quality based effluent limitations.

EPA is responsible for defining the required level of treatment for municipalities and for each type of industry to meet EPA's standards. EPA also must develop water quality criteria, specifying the maximum concentrations of pollutants permitted for different designated uses of waters.

These requirements are implemented and enforced through permits. Section 402 of the Act requires that all point source dischargers that discharge pollutants directly into jurisdictional waters must obtain a permit for that discharge either from EPA or a state, if the state has an EPA-approved permitting program. Currently, 45 states and the U.S. Virgin Islands have approved permitting programs. Permits are based on both technology requirements and water quality impacts, and set the concentration and amount of pollutants allowed to be discharged.

Permits issued under section 402, and under approved state programs, are required to be reviewed every 5 years. However, after two Supreme Court decisions (*SWANCC* and *Rapanos*), questions have been raised as to whether this periodic review will also require permitted entities to undergo jurisdictional determinations to determine whether the waterbody into which the discharge is released remains under the jurisdiction of the Clean Water Act.

Section 404 Program

The Section 404 program of the Clean Water Act regulates discharges of dredged or fill material into waters of the United States. Section 404 requires that permits be obtained in order that dredged or fill materials can be discharged into waters of the United States. The Corps and the EPA share responsibility for administering the Section 404 dredge-and-fill program.

The Corps' regulatory program utilizes both general permits (commonly referred to as 'nationwide' or 'regional' permits) for activities that are similar in nature and that will likely have a minor effect on wetlands, and individual permits for more significant activities. According to the Corps, it evaluates more than 100,000 permit requests annually. Of those, more than 90 percent are authorized under a general permit, which can apply regionally or nationwide, and is essentially a permit by rule, meaning the proposed activity is presumed to have a minor impact. Most do not require pre-notification or prior approval, and 87 percent of which are approved by the Corps in under 60 days.

About 10 percent (or about 10,000) are required to go through the more detailed evaluation for an individual permit. Of this number, roughly half are permits related to "letters of permission", or determinations by the Corps that the activity does not affect the traditional navigability of a waterbody (i.e., construction of a dock). The remaining 5,000 permits that must proceed under an individual permit process may involve complex proposals or sensitive environmental issues and can take 180 days or longer for a decision.

According to the Corps, nationwide, over 99 percent of permits are approved, although not always in the manner initially requested by the applicant. When permit applications are made, the Corps typically works with the applicant to modify the proposed action in a manner that will, to the maximum extent practicable, avoid or minimize losses to wetland values, and if such impacts cannot be avoided, require the applicant to carry out mitigation for lost values.

The Section 404 program consists of two distinct stages. Parties applying for a permit to place dredge or fill material into a water body must first undertake a jurisdictional determination. This process determines whether a water body, including wetlands, is within the jurisdiction of the Clean Water Act (and the federal government.) The second stage is a permitting stage, where an individual permit application is reviewed, and potential mitigation measures are outlined.

Similar to the 402 program, states can apply to assume Section 404 authority, but only two states have done so: Michigan and New Jersey. To assume Section 404 authority, states must have a wetlands discharge, dredge, and fill program that is at least as stringent as the federal program. Upon state assumption of the Section 404 program, the active federal program ceases.

Permit Exemptions

Under the Clean Water Act Amendments of 1977, a number of categorical activities are specifically exempted from the permitting requirements of the Act.

Under Section 402, permits are not required for discharges composed entirely of return flows from irrigated agriculture, or for discharges of stormwater runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, or channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct, or waste product located on the site of such operation.

Under section 404, permits are not required for the following activities:

- Normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices;
- Maintenance, including emergency reconstruction of recently damaged parts, of currently serviceable structures, such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches and transportation structures;
- Construction of temporary sedimentation basins on a construction side which does not include placement of fill material into navigable waters;
- Construction or maintenance of farm roads or forest roads, or temporary roads for moving mining equipment, where such roads are constructed and maintained, in accordance with best management practices;
- Any activity with respect to which a State has an approved program under Section 208(b)(4) of the Clean Water Act (related to area-wide management plans) and meets the requirements of subparagraphs (B) and (C) of such section [class or category of activities governed by Statewide regulation, and approved by the Administrator of EPA.

Certain activities are also exempted, by regulation, from the requirements of the Act. For example, activities undertaken on prior converted cropland are exempt.

U.S. Supreme Court Decisions Affecting Federal Jurisdiction

The United States Supreme Court has addressed the scope of Section 404 of the Clean Water Act on three occasions, in 1985, 2001, and 2006.

United States v. Riverside Bayview Homes, Inc. (1985)

In the first case, *United States v. Riverside Bayview Homes, Inc.*,[19] (*Riverside Bayview*) the Supreme Court unanimously upheld the Corps' jurisdiction over wetlands adjacent to "other bodies of water over which the Corps has jurisdiction," and held that wetlands adjacent to such waters were "waters of the United States" within the meaning of the Clean Water Act.

Solid Waste Agency of Northern Cook County v. Army Corps of Engineers (2001)

In January 2001, the United States Supreme Court issued a 5 to 4 opinion, in the case of *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*[20] (*SWANCC*), overturned the authority of the Corps of Engineers to regulate intra-state, isolated waters, including wetlands, based solely upon the presence of migratory birds (i.e., the Migratory Bird Rule.)

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[19] 474 U.S. 121 (1985).

[20] *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers*, 531 U.S. 159 (2001).

While the holding of the *SWANCC* case was very narrow, ruling that the Corps could not use the presence of migratory birds on an individual waterbody as the sole basis for Federal jurisdiction under the Clean Water Act, this decision marked the first time that the Supreme Court called into question Federal authority over U.S. waters under the Clean Water Act. In the discussion of the Court's opinion, Justice Rehnquist opined that when Congress used the term "navigable waters" in the Clean Water Act, Congress must have intended there to be some nexus to actual navigation.

In a footnote, the majority referenced the legislative history of the original Clean Water Act wherein Congress indicated that it "intend[ed] that the term 'navigable waters' be given the broadest possible constitutional interpretation," and then noted that Congress intended the phrase 'navigable waters' to include at least some waters that would not be deemed navigable under the classical understanding of that term.

Rapanos v. United States (2006) and *Carabell v. U.S. Army Corps of Engineers* (2006)

The third Supreme Court opinion involved the combined cases of *Rapanos v. United States* and *Carabell v. U.S. Army Corps of Engineers*[21] (hereinafter collectively referred to as "*Rapanos*.")

In *Rapanos*, the court reached a 4-4-1 ruling on the issue of the jurisdiction of the Clean Water Act.

Justice Scalia issued the plurality ruling that was supported by three additional justices; however, because this opinion did not received a majority vote of the Court, it is not controlling in terms of legal precedent on the scope of the Clean Water Act. Justice Kennedy provided a fifth vote for remand,[22] but offered a separate opinion resting on what is referred to as the 'significant nexus' test.

In Justice Scalia's opinion, the limit of the jurisdictional reach of the Clean Water Act is to those waters that are relatively permanent, standing, or continuously flowing and that form geographic features.[23] While the Scalia opinion rejected the argument that "waters of the United States" are limited to only those waters that are navigable in the traditional sense and their abutting wetlands, it concludes that permanent, standing, or continuously flowing waters must be connected to traditional navigable waters. In Justice Scalia's view, intermittent or ephemeral waters would not be covered.[24] Under the Scalia rationale, for any wetlands to be covered under the Clean Water Act, they would have to be physically connected to these "permanent" waters.

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[21] The Supreme Court granted *certiorari* in both *Rapanos v. United States*, No. 04-1034, and *Carabell v. Army Corps of Engineers*, No. 04-1384, and consolidated the cases for review. *Rapanos v. United States*, 126 S.Ct. 2208 (June 19, 2006).

[22] While a 4-4-1 decision, the *Rapanos* decision was 5-4 to vacate the lower court decisions and remand the case for further proceedings. In remanding the case back to the lower courts, the majority could only agree that the Sixth Circuit Court of Appeals did not exercise a sufficiently rigorous test to determine whether the waters were, in fact, subject to the Clean Water Act. *See* Jon Kusler and Pat Parenteau. 2006. "Discussion Paper: Rapanos v. United States, 'Significant Nexus' and Waters Subject to the Clean Water Act Jurisdiction." Association of State Wetland Managers.

[23] 126 S. Ct. 2221-2 (2006)

[24] 126 S. Ct. 2222 (2006)

The Scalia opinion reached the conclusion that regulating the discharge of dredged or fill material under Section 404 of the Clean Water Act constitutes an unauthorized intrusion into traditional state authority over land use regulation. In his opinion, he did not give traditional deference to the long-standing agency interpretation that "waters of the United States" can include areas that are not permanently inundated or directly connected to such permanent waters. Having reached that conclusion, he was highly critical of what he characterized as "the immense expansion of federal regulation of land use that has occurred under the Clean Water Act – without any change in the governing statute – during the past five Presidential administrations."[25]

Justice Kennedy's opinion rejected the Scalia plurality's reasoning as "inconsistent with the [Clean Water] Act's text, structure, and purpose."[26] In his opinion, Justice Kennedy argues that a 'significant nexus' test be used to determine federal jurisdiction of waters. This test is wholly separate from the physical, continuous connection to permanent waters test of the Scalia plurality opinion. Recognizing the existence of the *SWANCC* jurisprudence in providing some meaning to the term "navigable," Justice Kennedy wrote:

> [The] Corps' jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. The required nexus must be assessed in terms of the statute's goals and purposes. Congress enacted the law to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." ...Accordingly, wetlands possess the requisite nexus, and thus come within the statutory phrase "navigable waters," if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable."[27]

The four dissenting justices, led by Justice Stevens, argued in support of maintaining the existing agency authority over waters and wetlands. The Bush administration argued this position in front of the Supreme Court in the *Rapanos* decision, and, on behalf of the United States, EPA and the Corps also submitted a brief in support of this position to the Court.

In summary, as a result of the *Rapanos* decision having no true majority opinion, no clear statement exists as to which jurisdictional approach should be implemented by EPA and the Corps.

Federal Guidance of the Corps and EPA on Implementation of the *Rapanos* Decision

On June 5, 2007, the Corps and EPA released guidance on implementing the *Rapanos* decision.[28] The guidance was developed as an attempt to ensure that jurisdictional determinations and administrative enforcement actions (regarding Clean Water Act violations) take into consideration the legal analysis of the *Rapanos* decision.

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[25] 126 S. Ct. 2215 (2006)
[26] 126 S. Ct. 2246 (2006)
[27] 126 S. Ct. 2248 (2006)
[28] U.S. Environmental Protection Agency and U.S. Army Corps of Engineers. 2007. "Clean Water Act Jurisdiction: Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States" (June 5, 2007)

The guidance incorporates both the Scalia and Kennedy tests. Accordingly, individual permit applications under either section 402 or 404 must, on a case by case basis, undergo a jurisdictional determination, based on first, the Scalia test, and then, if necessary, the Kennedy 'significant nexus' test.

According to the guidance, and the Scalia test, the Corps and EPA would likely determine that the Clean Water Act applies to traditional navigable waters, wetlands adjacent to traditional navigable waters, non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries flow year-round or have continuous flow at least seasonally, or wetlands that directly abut such tributaries.

For all other waters, including wetlands, that fall outside of these categories, the guidance document would implement the Justice Kennedy 'significant nexus' test. This test is applied based on a fact-specific analysis to determine whether a significant nexus exists with a traditional navigable water for: non-navigable tributaries that are not relatively permanent; wetlands adjacent to non-navigable tributaries that are not relatively permanent; and wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary. However, there is some uncertainty as to whether the same 'signficant nexus' test would apply to both sections 402 and 404 of the Act,[29] because there is a greater likelihood that traditional section 402 pollutants (e.g. toxics and sewage) have a greater impact on waters than traditional 404 pollutants (e.g. dredged or fill materials). Accordingly, a waterbody that may be jurisdictional under the *Rapanos* guidance 'significant nexus' test under section 402 would not be jurisdictional under such test for section 404.

In addition, according to the guidance, the EPA and the Corps must coordinate on jurisdictional determination decisions in a number of instances. These include: determinations for intra-state, non-navigable isolated waters potentially covered under 33 C.F.R. § 328.3(a)(3), where jurisdiction is asserted or not asserted based on interstate commerce factors; and determinations based on a finding of a "significant nexus."

Finally, the guidance document asserts that the agencies generally will not assert jurisdiction over swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow, or ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Legislative History and Interpreted Scope of the Term "Waters of the United States"

Legal scholars, stakeholders, regulators, and others vary in their opinions as to the scope of jurisdiction that Congress intended under the Clean Water Act. Some believe the legislative history of the term "waters of the United States" is not declarative as to Congress' intent. For example, as first proposed, neither the House nor the Senate versions of the Clean Water Act included the term "waters of the United States." Instead, each included the term "navigable waters," and each defined that term differently. The House bill defined "navigable waters" as "the navigable waters of the

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[29] Justice Scalia, in his plurality opinion, dismissed concerns over the implication for regulating industrial discharges under section 402 of the Clean Water Act. He argued that even though the same definition of "navigable waters" might apply, the law prohibits "the addition of any pollutant to navigable waters." However, because this was not a majority decision, and only a plurality opinion, Justice Scalia's views are not controlling.

United States, including the territorial seas."[30] The Senate bill defined "navigable waters" as "the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes."[31]

The final compromise eliminated "tributaries" from the Senate bill and "navigable" from the House bill, defining the "navigable waters" as simply "the waters of the United States." In explanation, the Conference Report adopted a portion of the language of the preceding House Report: "The conferees fully intend that the term 'navigable waters' be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."[32] This is the language that has traditionally been relied upon by many to support broad interpretations of Federal jurisdiction.

On one hand, the statement that the term "navigable waters" should be "given the broadest possible constitutional interpretation unencumbered by agency determinations" could be interpreted to mean that Congress intended to assert jurisdiction to the broadest extent of its constitutional commerce power, including over activities and/or waters that have a substantial effect on interstate commerce. For example, during consideration of the Conference report to accompany the 1972 Clean Water Act, Congressman John Dingell noted that:

> [The] the conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographic sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in other laws. The new and broader definition is in line with more recent judicial opinions which have substantially expanded that limited view of navigability – derived from the *Daniel Ball* case (77 U.S. 557, 563)...[This] new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability...going to govern matters covered by this bill. Indeed, the conference report states on page 144: "The conferees fully intend that the term navigable waters be given the broadest possible constitutional interpretation..." [33]

In addition, as recognized by Justice Rehnquist nearly three decades ago, "congressional authority over the waters of this Nation does not depend on a stream's "navigability" ... as demonstrated by this Court's decisions ... a wide spectrum of economic activities 'affect' interstate commerce and thus are susceptible of congressional regulation under the Commerce Clause irrespective of whether navigation, or, indeed, water, is involved."[34] In this decision, Justice Rehnquist quoted an earlier Supreme Court decision (*United States v. Appalachian Electric Power, Co.*) that stated:

> [I]t cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. . . . In truth the authority of the United States is the regulation of commerce on its waters. Navigability . . . is but a part of this whole. Flood

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[30] H.R. 11896 (92nd Congress), § 502(8) (1972)
[31] S. 2770 (92nd Congress), § 502(h) (1971)
[32] S. Rep. No. 92-1236, at 144 (1972)
[33] A Legislative History of the Water Pollution Control Act Amendments of 1972, January 1973, page 250.
[34] *Kaiser Aetna, et al., v. U.S.*, 444 U.S. 164, 173-74 (1979).

> protection, watershed development, recovery of the cost of improvements through utilization of power are likewise parts of commerce control. . . . [The] authority is as broad as the needs of commerce. . . . The point is that navigable waters are subject to national planning and control in the broad regulation of commerce granted the Federal Government. 311 U.S. 377, 426 (1940).

On the other hand, the conferees' language could be interpreted, as others argue and the four Justices of the Supreme Court in it most recent cases read, to mean simply that Congress intended to override previous, unduly narrow judicial and agency interpretations to assert its broadest constitutional authority over traditional navigable waters.

In short, the legislative history of the 1972 Amendments to the Federal Water Pollution Control Act suggests that Congress did, indeed, intend to broaden significantly the reach of Federal regulatory authority over the nation's waters. However, what remains unresolved is how far that reach was broadened, and where the limits to Federal authority now exist.

The Committee is expecting to receive testimony from legal scholars, stakeholders, and government officials regarding their views on the scope of the nation's waters under the jurisdiction of the Federal Water Pollution Control Act.

APPENDIX

Permits issued under section 402 of the Clean Water Act, and under approved state programs, are required to be reviewed every 5 years. However, per the *Rapanos* guidance, periodic review may also be required for permitted entities to undergo jurisdictional determinations to determine whether the waterbody, into which the discharge is released, remains under the jurisdiction of the Clean Water Act. Some types of streams that are considered headwaters may not, as a result, be considered as falling under the jurisdiction of the federal government after conducting a 'significant nexus' test. EPA classifies headwaters streams in its analysis as including a variety of waters including intermittent, ephemeral, start reaches, and perennial streams.[35] As many of these streams are intermittent, many would see limited or no flow during much of the year if it were not for the effluent flow discharged from the permitted point source. Waters that are not considered under the jurisdiction of the Clean Water Act will not require Federal pollution control permits.

TABLE: Clean Water Act Point Source Pollution (NPDES) Permits Located on Headwater Streams by State[36][37] (Source: EPA Data and EPA Analysis of NPDES Data (2007))

STATE	Percentage of Current NPDES Permits with Location Data Located on Headwater Streams (%)	Number of NPDES Permits with Location Data Located on Headwater Streams
Alabama	47	566
Arizona	27	36
Arkansas	43	345
California	18	109
Colorado	22	66
Connecticut	9	12
Washington, D.C.	8	1
Delaware	31	17
Florida	25	104
Georgia	40	279
Hawaii	14	6
Idaho	14	15
Illinois	43	823
Iowa	42	513
Indiana	41	425
Kansas	18	10
Kentucky	50	910
Louisiana	34	393

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[35] "The [National Hydrography Dataset] characterizes stream reaches on flow characteristics such as perennial and intermittent/ephemeral, and "start reaches." We believe that the intermittent/ephemeral and "start" reach categories of water features provide the best available surrogate for providing a conservative estimate of the extent of "non-navigable" waters in the U.S. These categories are not mutually exclusive, i.e., a particular water can be both intermittent/ephemeral and a start reach. Start reaches may be navigable, but are not likely to be so. Similarly, the analysis assumes that intermittent-ephemeral waters are likely not navigable…In any event, "non-navigable" by itself is not determinative of jurisdiction." (EPA FOIA No. HQ-RIN-00684-07 (May 18, 2007))

[36] Data from Alaska not included because there is incomplete mapping data in National Hydrography Dataset.

[37] Table refers to numbers and percentages of permits with location data, by state.

STATE	Percentage of Current NPDES Permits with Location Data Located on Headwater Streams (%)	Number of NPDES Permits with Location Data Located on Headwater Streams
Maine	22	25
Maryland	46	215
Massachusetts	19	62
Michigan	26	163
Minnesota	30	183
Mississippi	55	401
Missouri	55	1,470
Montana	16	9
Nebraska	30	154
Nevada	14	7
New Hampshire	34	32
New Jersey	34	234
New Mexico	30	36
New York	30	544
North Carolina	37	513
North Dakota	33	11
Ohio	45	1,243
Oklahoma	39	191
Oregon	22	74
Pennsylvania	44	1,876
Rhode Island	23	21
South Carolina	40	215
South Dakota	38	138
Tennessee	47	555
Texas	38	662
Utah	30	30
Vermont	25	20
Virginia	43	536
Washington	10	37
West Virginia	35	239
Wisconsin	31	212
Wyoming	28	13

HEARING ON STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

Tuesday, July 17, 2007

House of Representatives,
Committee on Transportation and Infrastructure,
Washington, DC.

The Committee met, pursuant to call, at 2:00 p.m., in Room 2167, Rayburn House Office Building, the Honorable James L. Oberstar [Chairman of the Committee] presiding.

Mr. Oberstar. The Committee on Transportation and Infrastructure will come to order.

We meet to discuss one of the most important environmental issues of our time, the jurisdictional scope of the Federal Water Pollution Control Act Amendments of 1972. This is the first of two hearings and perhaps others that will follow on the history of the Clean Water Act and the intent of Congress over three decades ago in enacting this landmark legislation and on the effect of two decisions by the U.S. Supreme Court which in my judgment and that of many, many others has undermined the most successful environmental statute ever enacted.

This October marks the 35th anniversary of the Clean Water Act and, more importantly, the 51st anniversary of the Federal Water Pollution Control Act of 1956, authored by that gentleman portrayed in the portrait in the corner, John Blatnik, my predecessor in Congress, former Chairman of this Committee who first hired me in January of 1963 as Clerk of the Subcommittee on Rivers and Harbors.

I spent 44 years, much of that time in this Committee room and a good deal of it in another Committee room where the Public Works Committee started in the Cannon Office Building.

He had the vision as he assumed the Chairmanship in 1955 of the Subcommittee on Rivers and Harbors, traveled the Mississippi River to understand what was needed in the way of works by the Corps of Engineers to support the navigability of the Mississippi and its tributaries: the Missouri, the Ohio, the Illinois and many others.

But as he moved down the Mississippi River, a biochemist by training himself and a teacher of biochemistry, he said, what struck me was the increasing pollution of this mighty father of waters. By the time, he said, we got to New Orleans, there were raw phenols boiling in the water, dumped by countless cities along that 2,000 mile journey of the mighty Mississippi to the Gulf.

He came back to Washington, resolved to deal with the navigation needs and the dredging needs of traffic on the Mississippi but, more importantly, to deal with cleaning up discharges into the Nation's waterways that were polluting, poisoning our waters. Shortly after that, he went down to the Tidal Basin in full cherry blossom dress and called it the best dressed cesspool in America. Out of that came the Federal Water Pollution Control Act of 1956 signed by President Eisenhower.

A subsequent amendment to that act to expand the funding under the program from $30 million, 30 percent Federal grants to $50 million was vetoed by President Eisenhower. His veto message was written by Bryce Harlow, later a lobbyist for Procter and Gamble, with the salient two sentiments: Pollution is a uniquely local blight. Federal involvement will only impede local efforts at clean-up.

That year, John F. Kennedy was elected President Kennedy was elected President, and one of his critical elements of his platform was cleaning up the Nation's waters. That resulted in amendments of 1961 that expanded the program, subsequent amendments that improved it and then the far-reaching classic act of 1972 vetoed by President Nixon, a veto overridden by a vote of 10 to 1 by the Congress in October of 1972.

An historic commitment to cleaning up the Nation's precious resource, irreplaceable, all the water, all the water we have that ever existed that ever will be is here now. We are not going to create more water.

This Committee bears responsibility for determining the future success of this Clean Water Act or its failure, and our work has been made difficult by the interpretation of the Supreme Court. In crafting that legislation and much of the House-Senate conference took place right in this room, I was part of that over many months. It was an 11 month conference. We clearly intended the broadest possible constitutional interpretation of the Act.

I have read the SWANCC case. I have read the Rapanos case. I strongly disagree with the Court's invention of a fiction, a fictional juncture between authority to protect and so-called traditional navigable waters. All those who participated in that House-Senate conference understood the traditions of Congressional authority for traditionally navigable waters, but they purposely moved away from those notions in order to establish a new national commitment for clean water.

We understood after extensive hearings on the subject, extensive practice under the 1956, 1961, 1967 Act amendments that we needed broader authority to deal with the quality of receiving waters than just dealing with the lakes and streams themselves.

John Blatnik, in Floor consideration of the bill, said: In this measure, we are totally restructuring the Federal Water Pollution Control program and making a far-reaching national commitment to clean water. As much as our space program was restructured a decade ago when the late President Kennedy committed America to land on the moon, the legislation we are considering is of immeasurable significance to the Nation.

In many ways and very predictive, he said, it is a far more difficult undertaking than the 42,500 mile interstate highway program which the Public Works Committee initiated in 1956. That has been hailed as the greatest public works undertaking in all history. The Water Pollution Control program we are initiating in this body will, in my judgment, be an even more monumental task.

That was a visionary statement.

The late Justice Rehnquist and current Justice Scalia pointed to the use of the term, navigable waters, which appears 86 times in the Clean Water Act, but the legislative history is very clear. The very opening paragraph of the Act says the purpose of this Act is to maintain the chemical, physical and biological integrity of the Nation's waters. The very opening statement makes the definition of terms, makes it very clear what the purpose of the Act was.

We have learned over many years that dealing with isolated waters, only receiving waters or only intermittent streams was not sufficient to protect waters. The language specifically referred to waters of the United States and the territorial seas. Our Committee report clearly said: "The Committee was reluctant to define the term, navigable waters, on the fear that any interpretation would be read narrowly which is not the Committee's intent."

Then when we got into conference, "The conferees fully intend that the term, navigable waters, be given the greatest possible constitutional interpretation."

In the decades after enactment of the Clean Water Act, the Corps and EPA broadly interpreted that authority consistent with the intent of the committee of conference, consistent with the term of the legislation itself. So over 30 years, we have a body of practice, a body of application of this Act to address potential impairments of the water at their source, not just further downstream. Federal Government agencies have been able to administer this program very, very effectively and within keeping of the original purpose of the Act.

The objective of the legislation that I have introduced with a large number of co-sponsors is to restore, post-Supreme Court decision, the original purpose of that Act and to reinstate the way the Act has been administered for over 30 years. We come back to this Committee room to do what visionaries before us undertook to do in the name of their generation and of future generations.

Thank you. I yield to the Ranking Member, Mr. Mica.

Mr. MICA. I thank the Chairman and appreciate his convening this hearing today, the first of several hearings that will deal with the status of our nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act.

I might say that I think we are all here for the same purpose and the same interest. I think everyone with any modicum of common sense would want to preserve and protect our natural areas in this Country, our wetlands and our environmentally sensitive bodies of water.

I think we are here partially too, as we all know, because the U.S. Supreme Court kept a narrow definition of what we have come to know as a definition of wetlands, and that has resulted in a re-examining of that definition and also the status of our Clean Water Act performance.

Any definition, redefinition or expansion of the definition of wetlands, if not carefully crafted, can result and I think we have to be careful that it would result in initiating costly litigation, more red tape and even more uncertainty for future efforts to clean up the environment and our natural bodies of water.

Not only do we have that problem that we could impair future infrastructure development; we could halt projects around the Country that are necessary for development. We could depress employment opportunities. We could do all this, and we might in fact fail to achieve our original goal, and the original goal is cleaner water and natural bodies of water.

Today, we are going to hear about some of the problems and successes of the Clean Water Act and probably hear some recommendations on how to improve the law.

Some in Congress, including Mr. Oberstar and Mr. Dingell, have already introduced proposals to revise the Clean Water Act's wetlands program. It is doubtful, however, that these proposals will really clarify, as they are currently drafted, Clean Water Act jurisdiction or create any certainty for the regulated public.

Rather, I am concerned that these provisions could vastly expand Federal powers over private property, upset longstanding cooperative relationships that the Federal Government and the States have had with regard to water management and water quality, and create even more confusion and uncertainty over application and interpretation of the Act which will start all over again.

The legislation that has been introduced proposes a much broader definition of "waters of the United States." It will eliminate the traditional basis for Federal jurisdiction under the Clean Water Act by deleting the term, navigable, from the statute and expand the scope of Federal jurisdiction to its maximum limits under the Constitution. So all this opens a whole new can of worms.

These changes would effectively erase many of the decades of jurisprudence and invite the Federal courts to decide the constitutional limits of Federal authority under the Clean Water Act. This, in turn, will spur even more litigation as the Government and stakeholders struggle to clarify the uncertain scope of jurisdiction under these new proposals and this new language and these new definitions.

Congress has the responsibility to state clearly the jurisdictional limits of Federal regulatory programs, and I support that, but it shouldn't create more confusion and more controversy and more litigation, more uncertainty, as I am afraid might happen with the proposal that has been introduced in Congress.

I am pleased that our witnesses today and on Thursday will address their experiences with the Clean Water Act regulation. I anticipate we will hear about some of their problems and concerns with the way the program is currently working or not working.

I do reserve the right, however, to work with both the former Chairman of the Subcommittee, Mr. Duncan, and also with our current Ranking Member, Mr. Baker, to look at the possibility of crafting a legislative alternative and something that could provide a better definition, less controversy and less uncertainty in reaching our mutual goal. So I hold that in abeyance.

I hope the Members will listen to the testimony this week so that we can all work together to create legislation that is clear, legislation that is predictable, legislation that is reasonable and legislation that is truly protective of our water resources.

I yield back.

Mr. OBERSTAR. I thank the gentleman.

We will have ample time to debate the issues the Ranking Member has raised, and I appreciate him being frank and straightforward about his thoughts.

Governor, thank you very much for being with us today.

I say to my Committee colleagues that others who have statements can summarize them during their five minute questioning period of time, but we don't want to keep the Governor waiting. He has come a long way from Montana. I assume by Northwest Airlines since that is the best way out, but I know it is a trepidatious trip from out there.

You are awfully good to spend time with us. Governor, I just have one question, and that is: How were the poll ratings of your dog?

TESTIMONY OF THE HONORABLE BRIAN SCHWEITZER, GOVERNOR, STATE OF MONTANA, HELENA, MONTANA

Governor SCHWEITZER. Higher than mine.

[Laughter.]

Mr. OBERSTAR. They were higher than most of us from what I heard not some time ago. Generous of you to be with us today. Thank you very much.

I refer to a humorous comment the Governor made, speaking to a meeting of the Democratic Issues Conference a year or so ago. I wish I had the dog's poll ratings. Thank you.

Governor SCHWEITZER. Well, I have to be honest with you, Mr. Chairman and Ranking Member and the Members of this Committee. I try not to go places that I can't bring my dog along with me. So if I made an exception here today, it is an important issue that we are here today. I come before you not just as the Governor of Montana but as a soil scientist, as a rancher, as a third generation farmer in Montana.

Montana is known as the Treasure State, and it affects each and every one of you because for thousands of years in the high country of Montana we get large quantities of snow and through the summer this snow is melting and it renews America's water supply every single year. In Montana, we provide the snow that is 70 percent of the Missouri River system. We provide 50 percent of the water that is stored in the Columbia River basin system.

In Montana, at our Continental Divide, it is the only place in the United States that water flows to the Pacific, to the Atlantic and yes, indeed, also to the Arctic. We are the Headwater State and we are the Treasure State.

A hundred years ago, we were the Treasure State because of all the wonderful minerals in the mountain. Of course, we were blessed. God spent six days making the rest of the world and the rest of the States, and on the seventh day after all of that practice, he created the Big Sky Country where in our mountains we have gold and we have silver. We have copper. We have 30 percent of the Nation's coal supply. We have oil, we have gas, and we have the only platinum and palladium deposits in the Western Hemisphere.

So, indeed, we are the Treasure State. But as we have come to find out and find out during the recent years, probably the greatest treasure that we have is not necessarily the minerals in the mountain but the mountains themselves and this cleansing snow that we send to the rest of the States every year.

Now I seldom come before Congress and ask you to help us with anything because our history in Montana is that your help is very expensive. In fact, you help us manage the Missouri River draining system.

We already described for you how we provide 70 percent of the water in the Missouri River system. We have the first big reservoir on the Missouri River system, and we think that we ought to have the opportunity to keep that first reservoir full for recreation, for irrigation, but we only have one Member of Congress and North Dakota only has one Member of Congress and South Dakota, the same.

In fact, as it turns out, all of the States upstream from Missouri have fewer collectively than the State of Missouri. So the Missouri River ends up getting managed for the benefit of the State of Missouri and floating their boats as opposed to all of the concerns that we have upstream.

If we, as leaders, could learn a single thing from the people who have occupied Montana and the Great Plains, the Indian people that have occupied it for as much as 5,000 years. Their leadership understood that you need to protect the future.

We, as politicians, I bet you have all done this once or twice. You say we need to do something for our children, and some of you are visionaries and you say for our grandchildren, and some will even say the future generations.

But the people who have occupied Montana and the Treasure State sustainably for more than 5,000 years, when they made their decisions, they always considered the seventh generation. If we were to consider the seventh generation, I think we would make different decisions than we have been making relative to our Nation's water.

Let us talk about this bill. To use as the barometer as to whether we are going to manage this water for clean water as to whether it is navigable or not is ludicrous. The natural filtration system at the headwaters of our water systems, that natural purifier, by definition, are these streams and streams that only flow when the snow is melting. Some of these headwater streams only flow for a few months per year, and yet that is your supply of clean water.

We ask you to support this legislation, but we also ask you for some common sense because if you were to put the map of Montana on the northeast, it would run from New York City to Indianapolis, and yet we only have 930,000 people.

We have a natural filtration system, and we make a living in Montana running cows on the range, and sometimes those cows drink water out of a pond or out of a river. We don't want the long arm of the Federal Government telling us we can't do that.

We don't want the long arm of the Federal Government stopping us from sustainable logging in Montana, and we don't want the long arm of the Federal Government telling us what we ought to do with our fisheries at the high reaches of the Rocky Mountains. We want you to be our partner and collaborator.

We don't want to put the Federal Government in the position of managing our waterways all the way to the Rocky Mountains. We want you to be our partner, our collaborator. We want you to help us protect the water supply for the rest of the Country, but we don't want to put our farmers out of business, our loggers out of business, our cattlemen out of business.

I think that is the intent of what we are attempting to do here is to help protect the water and to maintain those natural resource businesses that we have in places like Montana. So, again, I thank you for considering this legislation.

It is important because I understand the way lawyers look at things. They went off to law school, and there is a lot of words and a lot a books, and they try and draw a line between navigable, non-navigable, but that is not the way you manage resources on the ground. Clean water isn't necessarily a place that you can float your boat. Clean water actually has more to do with the places that you don't float your boat because those are our natural filtration systems.

So, again, I thank you. I encourage you to support this legislation, but I want to make sure that you protect those of us who are upstream, providing your water and don't put our livestock people out of business, our loggers out of business and those who use water for irrigation.

Let us protect the waterways, let us protect the fisheries, and let us protect the seventh generation. Thank you very much.

Mr. OBERSTAR. Governor, I think that reference to the Native American people, the seventh generation, is something of great significance for all of us to ponder and to weigh carefully. I have read several of the treaties of 1837 and 1854 in which the promises were made by the great white father in Washington to the Native Americans as long as rivers flow. Let us make sure we keep the rivers flowing.

Mr. Duncan.

Mr. DUNCAN. Well, thank you very much, Mr. Chairman, and let me say that, first of all, I don't suppose there is anybody in the Congress that admires and respects your knowledge of this Committee and its work more than I do.

I think what we are all attempting to achieve here is balance.

Last year in this Subcommittee, we passed a resolution commemorating the 30th anniversary of the Clean Water Act. We are all proud of the great progress we have made in making our waters cleaner over the last 30 years, and much of that progress was made because of the work of this Committee and because of the work of our Chairman over the last 44 years both on this Committee staff and on this Committee.

Governor, certainly, it is an honor to have you with us. I have a first cousin who is a radiologist in Libby, Montana, and has been there for many, many years and loves it.

I think the philosophy that you have expressed in your opening statement is one that is shared by almost everybody on our side when you say that you don't want the long arm of the Federal Government managing your waters or preventing sustainable logging or hurting your farmers and ranchers. As I said, I think that is what we need to try to achieve.

There are some groups who don't want to admit that we have made progress over the last 30 years because they have got to keep telling us how bad everything is so they can keep their contributions coming in.

Also, at the same time while we are proud of the progress we have made, we want to try to do better, but we have also noticed that in almost every industry or area that if we regulate too much, the little guys are the ones that are driven out of business.

And so, I hope you will help us since you have come here today and testified and you are assuming a leadership role in regard to this legislation. I hope that you will meet with the smallest of your ranchers and farmers in Montana and maybe even other States and make sure that we are not going to do anything that hurts them or drives them out of business because they already have it tough enough as it is.

Are you willing to do that?

Governor SCHWEITZER. I do that pretty near every day of the week.

Mr. DUNCAN. You have got in your statement that you are afraid that if we go with the Supreme Court decision that you would lose some Federal funding under the Clean Water Act. How much Federal funding does Montana get from the Clean Water Act right now?

Governor SCHWEITZER. I can't answer that question. I don't have that number in front of me. You might have that.

Mr. DUNCAN. Possibly what we could do would be to make sure in this legislation that you don't lose any Federal funding.

What I am thinking about is this. Governor McWherter, who was our Democratic Governor in Tennessee for many years, he would come to us every year and he would say, please, no more unfunded mandates. We have heard that from governors all over the Country, and it is a problem.

I think, again, you expressed the philosophy of the people on our side when you said you want us to be a partner rather than some type of dictator. With that, I don't think there is anything in your statement that I disagreed with, so I will just thank you for being here and let the Chairman move on.

Governor SCHWEITZER. May I respond?

Mr. DUNCAN. Yes, sir.

Governor SCHWEITZER. Then you know with having a relative in Libby, in Montana, we have had a history, being the Treasure State, of a lot of companies coming in and mining the minerals, and so we have a hundred years of mining activity, and that mining activity that we conducted a hundred years ago doesn't look anything like the way we do today.

We have a lot of those glory holes that have been dug into the side of those mountains, and now we have pH 2.5, 2.8 water flowing out of the highest reaches of the Rocky Mountains, flowing into your water supply. So we need to continue to rectify those concerns that we have to protect your water supply.

Of course, in Libby, probably one of the largest environmental catastrophes in the history of this Country where W.R. Grace was mining vermiculite mixed with asbestos and poisoned an entire town in one of the most remarkable places in America. The consequences of the actions that we have taken in the past are some of the things that we need to rectify in the future, not the kind of management that is conducted on the ground today but what has happened in the past. We still have hundreds of millions of dollars worth of cleanup to do in places like Montana.

Thank you.

Mr. DUNCAN. Well, I will say this. The people in Tennessee sometimes drink the water in California and Montana and places like that and vice versa. So I have always thought there was an important Federal role in regard to all of this that we are talking about here today. On the other hand, we can't do it all. There has to be an important State role and a local role.

But, as I said, I just think we have got to be careful and not over-regulate so that we drive the smallest of our businesses out of existence. In that case, you end up destroying jobs and driving up prices. The wealthy always come out all right, but who you hurt in that process are the poor and the lower income and the working people, and I think that is what we have got to be concerned about.

We have got to do everything we can for the environment, but we have got to make sure we don't harm humanity in the process.

Thank you, Mr. Chairman.

Mr. OBERSTAR. Thank you. I appreciate the gentleman's thoughtful remarks on my service on the Committee as well.

Ms. Johnson, our Chair of the Water Resources Subcommittee.

Ms. JOHNSON. Thank you, Mr. Chairman.

Governor, what are the water resources in Montana most at risk of being polluted or filled and destroyed in the scope of the Clean Water Act if it is reduced and the law is read to exclude certain tributaries, streams and wetlands?

Governor SCHWEITZER. The highest reaches of the Rocky Mountains often times contain the most minerals, and so near the Continental Divide is where we have been mining gold and silver and copper for well over a hundred years.

In many cases, with the Mining Law of 1872, people came from all over the world to Montana for a very short period of time, and their aim was to dig a hole in the side of that mountain big enough so that they could collect enough gold that they could go back and buy their home town out. A lot of them did that, and what they left behind was these big old holes in the side of a mountain.

That mountain is a living place. There is water that flows through that mountain. It is part of the filtration system. When you excavate the side of that mountain and you expose pyrite To air and to water, pyrite is a mineral that will change the pH of the water from its native 7, 7.2, even 7.5 down to 2, 2.5 and that water flows out from the Continental Divide in streams that don't even flow all year into the next creek to the next creek to the next creek and to the river and finally to the Missouri River where it flows all the way to the Gulf of Mexico.

The greatest challenge that we have collectively is to protect the water supply for some 20 States that starts high in the Rocky Mountains of Montana. A great part of the problem we have isn't the things that we are doing today, but it was activity that was conducted as much as a hundred years ago, and we have no permanent solution to solve the problem. So we will have ongoing water treatment for as long as the snow lands in the high countries of Montana.

So we need your help. Thank you.

Ms. JOHNSON. Thank you very much.

Mr. OBERSTAR. Mr. Petri?

Mr. Coble.

Mr. COBLE. Thank you, Mr. Chairman.

Governor, good to have you with us.

Governor, you mentioned your ranchers earlier. What sort of response have you had from your farmers and ranchers and localities to this proposal?

Governor SCHWEITZER. Well, farmers and ranchers in Montana like clean water because the most likely folks to drink the water on their ranches are themselves and their livestock. The ranchers in Montana want to make sure that we maintain a high quality of water because that is the water for their livestock. The farmers in Montana want to continue with a clean water supply because we export our agricultural products all over the world, and a great part of our production is with irrigation.

So farmers and ranchers are supportive of clean water. Farmers and ranchers would like the Federal government to help us. Remember, most of these farms and ranches are more out on the prairie and the water starts high in the Continental Divide at those old mines that we have there. The last thing a rancher wants is for some of that water to flow down out that mountain with low pH or heavy metals that would destroy his land or his livestock.

Again, the farmers and ranchers would like your help, but they wouldn't like to be in a position where the Federal Government says, oh, boy, you know that stock pond that you have got there on your ranch where you built it or your granddaddy built that thing 75 years ago? Well, you no longer can have your cattle take water out of that because now we in Washington, D.C. think we own that water.

That is something that we don't want to see happen.

We also don't want the Federal Government to come in and say, the way you are irrigating, sir, has got to change today without the resources to change.

So if you want us to change in Montana, you bring us the dollars and we will do some of those changes.

Mr. COBLE. Water, the essential commodity for generations has generated much controversy in a way. So I think we all want clean water.

Governor, I am told that western Montana is currently experiencing a boom in natural gas production, presumably greatly benefitting your State's economy. How will H.R. 2421 affect, if it will affect, Montana's economy and the ability of what is probably a regulated energy sector to develop natural gas with every small and presumably intermittent body of water may well be under Federal regulation? Will that have any adverse or negative effect?

Governor SCHWEITZER. Our natural gas is actually for the most part in eastern Montana. Our dry natural gas which is drilled much deeper to as much as 8,000 and 12,000 feet, probably not affected at all.

But coal bed methane which are shallow wells that are drilled to coal seams, 500 to 1,000 feet, that have been aquifers, it would affect us a great deal. The way you develop coal bed methane is you drill a well to the coal seam 500 or 1,000 feet deep and you start pumping the water out and you release the pressure and then the gas starts to flow.

We already have some great concerns with coal bed methane because the water that is associated with that coal is often very high in sodium. The sodium absorption ratio is very high. If you just dump that water in one of our rivers and the irrigator downstream brings that water back out and irrigates his farm, after about eight or ten years, he is going to have big reductions in yield because his soil will start turning to cement.

So probably not going to affect us that much because we are already regulating that coal bed methane industry. We are saying to them, if you have got high sodium water, you are going to have treat it before you put it in the river or you are going to have to reinject it back into a deeper geological structure.

Montana already has some regulations that are dealing with coal bed methane and, frankly, our regulations are different than Wyoming's. Wyoming now has about a hundred times as many of these coal bed methane wells as us, and they are dumping their water into the Tongue and the Powder Rivers that flow up into Montana. Then we become the recipient of that sodium. So there is kind of a rub between us right now in Wyoming and Montana.

Mr. COBLE. I thank you, Governor. Good to have you with us, Governor.

I yield back, Mr. Chairman.

Mr. OBERSTAR. I appreciate the gentleman's question. I just want to remind the gentleman that in the Energy Act of 2005 Congress exempted oil and gas exploration from the provisions of the Clean Water Act, and that covers the question you asked, not that I agree with that. I opposed it vigorously, but I lost that argument on the Floor.

Mr. COBLE. Mr. Chairman, you don't lose many arguments.

Mr. OBERSTAR. The gentleman from Washington, Mr. Baird.

Mr. BAIRD. Governor, I very much appreciate it. It is good to see you again and good to have a fellow westerner out here.

I think you have hit the nail on the head in terms of the challenge. This is it. As we say, we are a pretty wet State, but we have also got a dry east side as you know.

The challenge we face is let us suppose you are a farmer and it rains a fair bit. Water collects on part of your farm, and that gets your farm classified as a wetland. Then you have to get the permitting to do anything you want around there.

One thing I would like to ask you about for the edification of the whole Committee is if we were to pass legislation preserving the status of the Clean Water Act protects for wetlands but not do anything on the permitting side, particularly vis-a-vis salmon and other things like that, could you enlighten us a little bit about the challenges your State, my State and other northwestern States face with environmental permitting that doesn't affect States impacted by an ESA listing of a species that swims right by your major properties?

Governor SCHWEITZER. Well, as you know, in Washington and Oregon, they are primarily concerned about a species of salmon that likes to swim upriver, and then we built those dams. In Montana, we have a white sturgeon.

It is the doggonedest thing. The time that we need to release water from the reservoirs in Montana so that we can improve the habitat for the white sturgeon is exactly the wrong time for the salmon and vice versa. So since there are more Congressmen from Washington and Oregon than we have in Montana, we often times end up releasing the waters for the benefit of the salmon.

Here is the way it works on the ground in a place like Montana. You want to do some work around your stream or wetland or something like that. You go right on into your local conservation district, and you first get a 310 permit.

You have local on the ground farmers and ranchers elected from that community that come out and take a look at it and see if it makes sense and whether there is going to be any deleterious effect to folks around because of that activity. They think it is going to be okay. You get your 310 permit.

If it is on a little bit bigger river, then you need the Army Corps of Engineers to come in and do a little work for you, to decide whether it is going to be okay. In some unusual cases, you are going to have to have the EPA do something. But for most of this work, small streams, wetlands, it is probably just a 310 permit and it will be issued by your conservation district that has been locally elected.

Mr. BAIRD. See, we have it different, and I think that illustrates one of the challenges that led to the Court decision and that is before us today. Even if you have a relatively small holding, you may well need to get a Corps of Engineers permit, and that is a much more difficult process than that which you have just described.

I think that would be one of the questions, Mr. Chairman, the people would have about this is how the permitting interface with this legislation will be affected in terms of if you don't.

It is particularly consequential for us in that because of the listing of salmon and steelhead and bull trout, we have got so many listed species proximal to major metropolitan areas and because of lack of staff of Corps of Engineers permitting officials.

The more water areas that fall under jurisdiction, the more the permitting demand is. Without a commensurate increase in permitting personnel, you have these enormous backlogs. Two, three, four, five years is not uncommon. That money that is spent both in opportunity costs, direct expenditures, permitting, et cetera, could be used in other ways, and it could be deeply frustrating to our private landowners. So we face this paradox.

Your point is well taken, Governor, that we want to protect the water supply. That includes the aquifers. We get aquifer supply from Montana as you know well. Some of our aquifers in Washington State are sourced out of Montana.

Governor SCHWEITZER. We will send you the bill.

Mr. BAIRD. Well, the reason I say that is there is some legitimate commerce issues here. Some people say, well, there is no commerce clause here. I think there is a commerce clause applicable because it does cross State lines, but at the same point we have got to deal with this regulatory situation because it has a profound impact.

The Corps, by the way, parenthetically, not only have they traditionally been underfunded in terms of permitting staff, but the Iraq conflict has pulled some of their best staff. This is an anti-Iraq statement. It is just a statement of fact. It has pulled some of their best staff off mid-processing time, thereby further extending the backlog.

As we deliberate the Chairman's well intentioned legislation, I think we need to look realistically at permitting consequences, particularly in States where this has an impact.

I am glad to see you here, Governor, and I yield back the balance of my time. Thank you.

Governor SCHWEITZER. Thank you.

Mr. OBERSTAR. We dealt successfully with permit streamlining in the SAFETEA-LU legislation for highways, and I hope we can work out a streamlining proposition for the Clean Water Act.

Mr. Gilchrest.

Mr. GILCHREST. I thank the Chairman.

I came in a little bit late, but I appreciate your recognizing me. I won't be too long because I know Mr. Ehlers has been sitting here longer than I have.

Mr. OBERSTAR. If you wish to yield to Mr. Ehlers, I will be happy to recognize him at this time.

Mr. GILCHREST. I will just ask two quick questions to the gentleman from Montana, and I will yield two minutes to Mr. Ehlers who will later get five minutes, so he will get seven minutes.

Mr. OBERSTAR. In my State, we call that Minnesota nice. Now that is Maryland nice.

Mr. GILCHREST. Maryland nice. We are trying to mix it up with Minnesota, Maryland, Michigan, Montana, all the M States.

Governor, I appreciate you being here and your knowledge on this issue.

I just want to make some quick comments for the Members that are here, that the present Clean Water Act, Section 402 but specifically 404, exempts the following activity from needing a permit: normal farming practices, silviculture, ranching activities such as plowing, seeding, cultivating, minor drainage, harvesting for production of food, fiber, forest products, upland soil and water conservation practices.

All those practices right now do not need a permit. They are exempted from a permit in 404.

Maintenance including dykes, dams, levies, groins, riprap, breakwaters, causeways, bridge abutments, et cetera., they don't need a permit, not even a nationwide permit; prior converted cropland.

So there are numerous provisions in the Clean Water Act right now that recognize the need for that type of commerce, especially in the agricultural community.

The question is and I think Mr. Oberstar has included this in the provision of taking the word, navigable, which it seems to me in the history of the bill, the word, navigable, up until recent years, recent Supreme Court decisions, has basically been broadly interpreted as meaning waters of the United States.

But since we are now faced with a couple of Supreme Court decisions that make that a little bit difficult to interpret that way, my question to you, Governor, is Mr. Oberstar wants to take the word, navigable, out and replace waters of the United States in the same way that it has been interpreted since 1972 up until recent years. Now putting in a provision to ensure the agricultural community, that the exemptions that now exist for permits under the Clean Water Act, will continue to persist after this change has taken place.

Do you see any problem down the road with past judicial precedence or reinterpretation by outside groups that could bring lawsuits as being a problem with the proposed changes by Mr. Oberstar?

Governor SCHWEITZER. Well, it has been my experience that as long as we hatch lawyers from our law schools, there is going to be reinterpretations of laws that we have written. That is how they make a living. And so, whether you pass any new legislation or you maintain the legislation that you have got right now, you are likely to have some challenges as we go forward.

My caution is simply this: Make sure that the unintended consequences do not occur which are to shut down legitimate businesses in the natural resource industry that already have good filtration systems, that are maintaining a filtration system that already exists, that are just simply trying to continue an irrigation business in a place that has already been irrigating for the last hundred years, and there has been no significant damages to the land or any endangered species.

I think that in the implementation of the rules, we can get there. But I would just caution that in writing this legislation, make sure that you give adequate authority to local folks on the ground to interpret these rules. For example, the conservation districts that I mentioned earlier that are locally elected, that have the charge of protecting the water in each of these conservation districts in nearly every agricultural county in America.

Mr. GILCHREST. Governor, you would not oppose taking the word, navigable, out?

Governor SCHWEITZER. Actually, I think that the term, navigable, has no place in deciding a bill about clean water because it doesn't really define those places that are actually filtration systems.

As I have described before, Montana's greatest problems are the mines that were left behind at the Continental Divide, and you can't float a boat over the top of the mountains because if you did, Lewis and Clark would have arrived at the ocean about two months earlier.

Mr. GILCHREST. Thank you very much.

Thank you, Mr. Chairman.

Mr. OBERSTAR. I thank the gentleman.

We will now go to Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

Governor, it is good to see you again, and you talk my language, sir.

Water is a big issue in most of the western States. One of the questions I would have for you is have you seen marked change in the water yield, the amount of water? Is the climate change affecting the amount of water that you are seeing whether it is in your streams, in your aquifers, in your flows?

Governor SCHWEITZER. I got to tell you. Montana being the Headwater State, and I already described to you that our water flows to the East Coast and the West Coast and up to the Arctic and 70 percent of the water in the Missouri River system and 50 percent makes it on to Washington and Oregon, the Columbia River system from Montana.

The driest 10 years in history have been during the last 11 years. We are getting less snow in the high country. It is melting sooner in the spring. And so, this recharge system that we have created in Montana for the rest of the Country, we are finding that that snow that used to last all the way into August until we would get some replenishing snow, it is disappearing, and some of those high mountain streams are drying up.

We have springs that are disappearing all across Montana. Artesian wells are drying up. We are getting less precipitation in the high country in Montana, and that affects each and every one of you in this Country.

As we get less snow there, we have less water for the rivers that recharge other rivers all across both the Pacific Basin, Atlantic Basin, all the way to the Arctic. It is affecting our irrigation supply. It is affecting our drinking water. It is affecting wildlife habitat.

Some of our fisheries in the high country, for example, we have had to suspend fishing in the afternoon at some of the best blue ribbon trout streams in America because we have less of that cold water flowing down out of those glaciers, and the water has become so warm that it can't contain as much oxygen as those fish need, and we are losing them.

That is something I can't control. The Governor of Montana is a pretty powerful guy, but I can't place more snow in the mountains in Montana.

I think you can argue about what is creating the climate change, but I don't think there are many people in Montana who would be willing to argue that there isn't something going on here. There is a climate change occurring.

Mrs. NAPOLITANO. What are you proposing to do to be able to reduce? A lot of conservation, possibly recycling storage? One of my biggest issues is recycling.

How do we educate our people to change with the climate, if you will?

Governor SCHWEITZER. It is a tough one.

Mrs. NAPOLITANO. Yes.

Governor SCHWEITZER. We don't respond well to things that aren't a crisis in this Country. Some of the things that we could do are to allow Montana to fill our reservoirs to full pool and not send it all down the Missouri so they could float a few boats. That would help us in Montana.

But, ultimately, there is only one way that I can deliver more water to the Missouri River drainage system because I can't guarantee you any more snow, and I can't make it rain just because I pray.

What I can do is I can tell you about a treaty that we had with Canada, Alberta, a hundred years ago. Coming out of Glacier National Park, right up at the highest reaches of the Continental Divide, there are a couple of rivers. There is the Milk River and there is the St. Mary's. We made an agreement with Alberta a hundred years ago that we would share the water equally in those two drainages.

Now this is where it gets interesting. The Milk River and the St. Mary start in Montana. Then they both flow up into Alberta. The Milk River comes back into Montana and ultimately flows into the Missouri River. Okay, now you know how you have got a dog in this hunt.

The St. Mary River just heads on up and goes to the Arctic. Well, we made a deal. We built an aqueduct that would bring half the water over from the St. Mary to the Milk, and then they would irrigate with a little bit in Alberta, and it would flow down into Montana and it would ultimately go into the Missouri.

Well, that old aqueduct has worn out, and we are not getting our full dose of water into the Milk River, so you are getting less water in the Missouri River. If you would help us out with a few shekels in Montana so we could maintain that system, I will promise you we will deliver more water to the Missouri River system.

Mrs. NAPOLITANO. And you would do that by?

Governor SCHWEITZER. Well, this aqueduct system that we have already built that is leaking and it is worn out, it is not able to haul as much water as we used to. If we can get the dollars in a cost-share with the State of Montana and with Alberta who will put some money in, we can move more water from the St. Mary into the Milk River drainage system that ultimately goes into the Missouri River instead of just going on up to the Arctic.

Help us out; we will bring you some water.

Mrs. NAPOLITANO. We will talk later. That is one of my issues.

Thank you, Mr. Chair. I yield back.

Mr. OBERSTAR. Mr. Ehlers?

Mr. EHLERS. Thank you, Mr. Chairman.

First of all, Governor, thank you for being here. You are a very refreshing witness, and I appreciate not only your comments but the wisdom behind those comments.

Mr. Chairman, first of all, I would like to ask unanimous consent that my opening statement be entered into the record.

Mr. OBERSTAR. Without objection, so ordered.

Mr. EHLERS. Thank you.

I think what came through your comments is simply that all water is connected, and that is in a sense why I support Mr. Oberstar's bill because we can't assume that isolated ponds are not connected with other aquifers under ground and above ground. They are all connected and we have to take that into account.

That means if you are going to worry about applying the law, someone has to go out and look at a particular situation and make a judgment as to how that is to be regulated.

On another issue which is related to water but not related to your testimony, Mr. Chairman, I just want to enter into the record here my concern over the sad news that British Petroleum plans to dump thousands of tons of ammonia and refinery sludge into Lake Michigan just north of Gary and under current law is allowed to do that. I found that astounding.

That must be a remnant of the old rule of thumb that dilution is a solution to pollution because dumping thousands of gallons of ammonia into Lake Michigan and thousands of cubic feet of sludge containing heavy metals does not seem to be a good solution, but apparently it is legal at this point. So I hope we will take that situation under consideration too.

With that, I will yield back.

Mr. OBERSTAR. That is appalling, absolutely appalling. We will have to join forces to prevent that from happening.

Mr. EHLERS. Thank you.

Mr. OBERSTAR. We have about an hour of voting ahead of us, and I would propose that we recess and not hold the Governor. Before we do so, I would like to just go around the room and invite Members who have not yet spoken to ask at least one question of the Governor without making a speech on it.

Ms. Hirono?

Mr. Miller.

Mr. MILLER. Yes, I really have some concerns with the bill. California is a different situation than you might face in your State. You talked about water carrying pollutants coming down from the mountains on the farmers.

The Clean Water Act in California has been applied so broadly through the courts that instead of source of pollution going to an industrial source, as it should since they are polluting the waters, it goes to a subdivision building homes. They say that might be a source of pollution, so you need retain all on your water onsite in the subdivision.

Mr. Chairman, I know who you are and you are a good man.

My concern that I have in this bill is that it appears to me that it is rather vague what waters could be construed to be of the U.S. If it is challenged in court by a special interest group, it could mean ditches, pipes, streets, gutters, drainage, farmland, groundwater, even a wastewater treatment plant. It could go to that degree. In many cases, it is being expanded beyond the intent today.

My concern is that that could be the result of this bill because I am not sure that the definition is clear enough in this bill, what the definition of waters and virtually anything that carries waters could be determined to be. I would strongly encourage you to review that section of the bill because I think if we pass this bill as drafted, the intent in my State is going to be horrendous as it applies to try and provide affordable housing for the growth that we expect in our State.

But we all agree on wanting clean water. We all agree that we need to do something about that.

My concern in your State is if this bill is not defined more properly, it could mean any waters running off of one of your dairies or your farms or whatever, and you could be required to keep all that onsite, which in California we really do. Our dairy guys have to retain all the water on their property that comes from their property. It has been litigated to that degree.

I think that should be a huge concern for your State, and I would please ask the Chairman to look into that and make sure we are more definitive.

Mr. OBERSTAR. I would invite the gentleman's attention to Section 6 of the Act, the savings clause which restates the key provisions of the Clean Water Act of 1972 and addresses those issues, limiting the Act to the purposes of the original law and not expanding it beyond that.

Mr. MILLER. I think the original law needs to be more defined.

Mr. OBERSTAR. Well, if you want to have a debate about the Clean Water Act of 1972, that is a different matter but about my bill that reinstates, I don't think there is a debate.

Mr. Arcuri? Mr. Carney? Mrs. Capito.

Mrs. CAPITO. Yes. Governor, I represent the State of West Virginia, and like my colleague from Washington, Mr. Baird, I share some concerns. Our permitting processes with the Corps for our coal mining are all held up in litigation. It is very lengthy, very costly and very discouraging to those who want to get coal out which I do to power America.

Do you have these same kinds of problems in Montana in terms of your permitting for your coal mines and how do you think this act will influence that?

Governor SCHWEITZER. Well, in all due respect to you and my good friend, Joe Manchin, our coal is real close to the surface, and so we just peel back 30, 40 feet of soil and go in with a front loader and dig it out like gravel. Then when the coal is gone, we push all that back in and replant it to native vegetation.

Mrs. CAPITO. You never have to worry about the intermittent stream and all that ephemeral stream?

Governor SCHWEITZER. The country where we have most of our coal is 10, 11 inch rainfall. There are no creeks running through there. We are well above where the aquifers are for the most part. Once again, God blessed us on the seventh day when he created the Treasure State and we didn't have to be in the situation of having to dig inside a mountain in order to get our coal. We get it pretty close to the surface with a tractor.

Mrs. CAPITO. Thank you.

I have concerns over the navigable water clause or removing that. I certainly am like everybody, wanting the clean water. I think it is something we need to work with. I look forward to working with the Chairman on this.

Thank you.

Mr. OBERSTAR. I look forward to it. Thank you.

Mr. Westmoreland.

Mr. WESTMORELAND. Thank you, Mr. Chairman.

Governor, have you read the bill?

Governor SCHWEITZER. Yes, I have.

Mr. WESTMORELAND. Okay. Did you read the section where it talks about waters of the United States and what all that includes?

Governor SCHWEITZER. I haven't got the bill in front of me. You can remind me.

Mr. WESTMORELAND. Okay, I will remind you: lakes, rivers, streams, intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds and all impoundments of the foregoing or activities affecting these waters.

Your 310 permit will be a thing of the past because what this bill does, it expands the EPA's and the Corps of Engineers' authority to these things where now it is navigable water. That long arm of Government is going to come into Montana, and I hate that because I think you are a very sincere person. I know the Chairman is very sincere on clean water. We all want clean water.

This is giving the Corps and the EPA authority over the State that you already regulate those things in a way that is beneficial for all of us, but that power will now be transferred to the Federal Government.

So that is all the comment I have, Mr. Chairman. Thank you.

Mr. OBERSTAR. I want to observe for the gentleman from Georgia who has cited this provision and invite his attention to the Corps of Engineers Code of Federal Regulations, Part 328, Definition of Waters of the United States.

Section 328.3, Definitions: All waters such as intrastate lakes, rivers, streams including intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes and all the other words that we have used in this bill are drawn exactly from 30 years of Corps of Engineers regulation in accordance with the term, waters of the United States.

This is not a new creation. This is not new regulatory authority. It is existing authority, I say to the gentleman and I yield to him.

Mr. WESTMORELAND. I thank the Chairman for that. I think the only thing that has kept the Corps and the EPA out of that is the navigable water portion of this bill which we are taking out.

But I respect the Chairman. I know that he has been here a lot longer than I have.

It is just that I have dealt with this in my business. I know the Corps. I am going to enter things into the record on the Corps that has held up reservoirs for drinking water for my county since the early 1970s, and we have not received a permit yet. I am very familiar with it, and I understand it.

I agree with Mr. Miller that we need some redefinition in the Clean Water Act, and I know that is a subject for another day.

Mr. OBERSTAR. Mr. Diaz-Balart?

All right, thank you.

The call of the House is more powerful than the call of questioning the Governor of Montana. We all have to go and vote.

I just want to reference some very thoughtful comments made in your testimony: We believe that all upstream tributaries, the waters that discharge into the Missouri, Yellowstone, Kootenai and Clark Fork, along with wetlands, are an integral part of our Nation's watersheds and affect the health of all waters of the United States—a very prescient, very thoughtful statement.

You reference the wetlands that are less than a percent of the State, and you say the ecologic and economic importance of the waters far outweighs their relative size. You picture for us a 50 gallon drum of PCBs leaking into one of the depressional wetlands, and the connection between these isolated waters and waters of the United States—a very powerful image to us.

It brings us back to the days of the forties and fifties when power companies were changing out their transformers, and they gave the spent liquid, that inert liquid to county highway departments. They spread that on the dirt roads to keep the dust down, not realizing, not knowing that it was PCB and that it would be washed off the road, into the ditch and from the ditch into the creek and from the creek into the tributary and the tributary into the river and then into the lake and then into the Mississippi, and generations have been poisoned because of it.

That is what you were talking about. That is what you have the prescience to understand. We will take to heart your counsel and that of Native American people to protect these waters into the seventh generation.

Thank you for your testimony.

Governor SCHWEITZER. Thank you very much.

Mr. OBERSTAR. The Committee will stand in recess until the conclusion of these votes, and we will resume.

[Recess.]

Mr. OBERSTAR. The Committee will resume its sitting.

We escaped with fewer votes than anticipated, and we will continue with testimony of Secretary Curry of the New Mexico Department of Environment.

We thank you very much for journeying a long distance to be with us today.

Please give Governor Richardson my great appreciation for making you available.

He and I served in the House together and traveled to El Salvador in pursuit of human rights issues in the early eighties, 1982, 1983, where Governor, then-Congressman Richardson visited hospitals where there were both wounded citizens who had been attacked by the ruling class and soldiers who had been attacked by the people resisting oppression. In his wonderful way, his warm and his native speaker Spanish fluency was able to comfort people on both sides of the conflict.

I think that is where he got his appetite for involvement internationally in human affairs issues and later went on to the United Nations and to being an intermediary in international conflicts. It started with our common excursion into El Salvador in pursuit of human rights in Central America. I have only the fondest memories of Bill Richardson.

Mr. CURRY. Mr. Chairman, I will certainly pass that on to him.

Mr. OBERSTAR. We welcome you today on a subject of similar magnitude, the Clean Water Act.

TESTIMONY OF THE HONORABLE RON CURRY, SECRETARY, NEW MEXICO ENVIRONMENT DEPARTMENT, SANTA FE, NEW MEXICO

Mr. CURRY. Thank you, Mr. Chairman. My name is Ron Curry and I am the Cabinet Secretary of the New Mexico Environment Department in the Administration of Governor Bill Richardson.

The Clean Water Act has been our Nation's main tool, as you know, in ensuring the continued protection of the water we drink, enjoy for recreation and that wildlife communities rely upon. Unfortunately, the effectiveness of this tool has been blunted by two recent Supreme Court decisions. This is especially troubling in New Mexico, a very arid State that has relied on the Clean Water Act to help us protect our limited but very, very precious water resources there.

It is important for us to remember that the passing of the Clean Water Act is one of our Nation's successes. Waters that 30 years ago were thick with waste discharges now support thriving recreation and economic activities. Our quality of life has improved and so too has the sustainability of aquatic species and wildlife, but now those protections are mired in widespread confusion amidst judicial and bureaucratic gridlock because it is no longer clear what waters will continue to be protected.

In effect, the Supreme Court has ruled that there are two classes of water, one that is tied directly to navigability and deserves Federal protection from pollution and the second class that is completely abandoned.

As the man put in charge by Governor Richardson with protecting New Mexico's limited water supply from pollution, I can tell you and I would hope that those of you have been to New Mexico can see this. I will tell you that basing the decision on what water deserves to be clean or whether you can float a boat on it is an extremely limited view. Quite simply, it is lunacy.

There are times during the summer months when you can't float a boat down the mighty Rio Grande. I can tell you since the mighty Rio Grande is New Mexico's main water source, there have been times when I have been able to walk across the Rio Grande without touching any water. So it is indeed lunacy.

To put it another way, many of you today have glasses or bottles of water in front of you. As an analogy, imagine that those glasses collectively made up the waters of the United States as you look around this room. Before 2001 and the SWANCC decision, the water in those glasses was protected by the Clean Water Act. However, today because of the SWANCC and Rapanos decisions, as much as half of those bottles of water or glasses that you have in front of you may no longer be protected.

I want you to have good clean water in those glasses or bottles that you are drinking out of, but if the Supreme Court decisions stand, no one can say for sure if that will be the case if those were the waters of the United States.

Nowhere have the limitations created by these two recent Supreme Court decisions been felt more acutely than in the desert Southwest. We simply have no water to waste in New Mexico and in Arizona and the rest of the Southwest. The water we do have and its quality is of utmost importance to our continued health, citizens and the future economic development of our region.

Additionally, waters within the closed basins that cover up to one-fifth of New Mexico would also be left vulnerable to pollution. That includes 84 miles of perennial streams, 3,900 miles of intermittent waters, 4,000 playa wetlands in New Mexico and numerous headwaters, springs, cienegas and isolated wetlands. Threatened basins include the Tularosa, Mimbres, San Augustine, Estancia and Salt in central, south and southwestern New Mexico.

The misguided Court rulings that we have been speaking about today also threaten New Mexico's precious limited groundwater resources, the source of 90 percent of our clean drinking water in the State of New Mexico. Surface water bodies are often directly linked to ground water resources. Unregulated damaging surface dumping will therefore ultimately lead to pollution of the aquifers. We cannot and I ask your help in not allowing this to happen.

The water beneath just one of those basins, the Salt Basin, has been estimated by the United States Geological Survey to contain as much as 57 million acre feet of water including 15 million acre feet that is potable. That could prove to be a vital and needed future water supply for the rapidly growing City of Las Cruces. Therefore, New Mexico also supports efforts to ensure that this bill preserves our traditional authority over ground water resources.

Governor Richardson has fought to restore protections to New Mexico's waters. In March, 2003, he filed comments with the EPA, petitioning that New Mexico's closed basins and other imperiled waters remain protected under the Federal Clean Water Act. He also has strongly supported the Clean Water Authority Restoration Act of 2003, a precursor of the legislation before you today.

The citizens of New Mexico depend on the protection of a clean environment and sustainable water supply. El agua es la vida. In New Mexico, we say, water is life, and water is life in New Mexico and the United States.

Thank you, Mr. Chairman. I look forward to your questions.

Mr. OBERSTAR. I thank you for your very thoughtful testimony and your well expressed understanding of the Clean Water Act as written and as administered over the years.

You say whether you can float a boat on the water is an extremely limited view and go on to say there are summer months when you can't float a boat down the mighty Rio Grande, and that is true of much of the arid West, that rivers simply dry up. But if you say, well, they have to be running all year long in order to be protected, then we won't be able to protect waters.

You correctly observe that the legislation simply restores protections, as you put it very well, in place for three decades. That is what we are trying to do, just restore the purpose of the Act to what it was before the Supreme Court legislated on this major water protection legislation.

I love that you say we in the Southwest have no water to waste. That is so true. We have no water to waste anywhere frankly.

I yield to the gentleman from Louisiana, Mr. Baker.

Mr. BAKER. Thank you, Mr. Chairman.

I want to make an observation that in all things, there is balance. I understand certainly your interest in preserving the quality of environmental assets for those who follow, and I strongly support that. Perhaps there is a difference in the manner in which we may choose to follow that.

I think in the discussion of navigable waterway, adjacent wetlands thereto or isolated wetlands, we really in the discussion should just move past all that and say we want the Corps to have jurisdiction along with the EPA nationwide. Just make it simple. In fact, have all those legal hocus pocus from SWANCC on. I don't go there, but I think in fairness of the philosophic discussion, we ought to at least say that is what we want to do.

In the example previously cited by the Chairman before the recess, talking about the distribution of polychlorinated biphenyls on a roadway, the fact that occurred is illegal in itself because PCBs are prohibited chemicals or very constrained utilization. If you distribute that in any unsafe or unsound manner, the EPA has statutory authority to pursue, fine and, as necessary, take criminal actions against those who intentionally violate the environment.

So I see there are two tracks. On one side, we can have a very well defined role for the EPA on all fronts to go after anything. If it is someone polluting your ground water in your home State, we ought to go after those folks. I don't defend that at all, obviously.

But, at the same time, there is a consequence to actions which would define South Mountain in Maricopa, Arizona, which I am going to enter the photograph in the record because I think it is such a great one. From 1993 to 2000, this, what is called a drainage area, carried water 5 times with 182 reported rainfall events for a total flow in over seven years of seven hours. Now this becomes a waterway, navigable waterway subject to the jurisdiction of the Corps. That is where I think the equities are not balanced.

The consequence of that to a landowner is that whatever your intended utilization for that property can and most likely will be impaired by the findings of a 404 permitting process. Now if we were to reach the conclusion that that is in the social best interest of all parties affected, then we at least ought to have a provision that would enable the Federal Government to compensate that landowner whose right of use has been taken by the finding by the Corps that the rocks of Maricopa were a wetland. That is the balance we are trying to find here.

Do those issues resonate with you or do you think that the adoption of the bill as currently proposed overwhelms any of those counterbalancing concerns?

Mr. CURRY. Member and Mr. Chairman, I think the bill as it is proposed will provide necessary protections not only for the environment and the waters that we are concerned about, but I think it will provide necessary protections for the property owners that you speak of.

I think in New Mexico, we are concerned many times about closed basins, and those closed basins often times have the potential to be used for illegal dumping of some sort or another.

Mr. BAKER. On that point, let me ask as to your authority with the Department of Environment in your home State. What are you empowered to do when you see an action being taken that is against the public interest or any of the things you are concerned about?

Somebody is playing with the drinking water. What are your authorities under State law to prohibit that action from taking place?

Mr. CURRY. Mr. Chairman and Member, we are empowered by the State legislature to take necessary action to protect the health and the environment of New Mexico.

But what we don't want to run into and why we support this bill and why Governor Richardson supports this bill is to find clarity in what is being enforced upon, to find clarity in our State, like I said earlier, where we don't have the ability to navigate down the Rio Grande, where we don't have the ability to navigate down the arroyos of northern New Mexico and southern New Mexico but where we have situations where there is a point source discharge along those arroyos that may only flow for only 30 days out of the year. We have to have the ability to go in there and enforce in those areas even though certainly no boat can ever float down those arroyos.

Mr. BAKER. Defining that property as a navigable waterway for the purposes of enforcement under the Clean Water Act is a separate and distinct issue from your regulatory authority to proceed in the public's interest. When you couple State's rights together with Federal environmental rights, there are very few things that can occur in this Country today that are detrimental to the environment for which there is not a civil or criminal penalty. That is the only point I am making.

I don't know that we need to adopt this particular language to resolve your concerns, but I thank you for your appearance, sir.

Mr. CURRY. Okay, thank you.

Mr. OBERSTAR. I thank the gentleman.

The gentlewoman from California, Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chairman.

Sir, it is great to have you in this hearing. I listened to great interest as I was walking in, although late, to your remark on the Rio Grande. I was born and raised in Brownsville, Texas, and there were pictures in the Brownsville Herald of where a shoe would not fit into the river. So I understand from that vantage point.

I am also very concerned some of the issues that most of the West is facing in regard to the drought, climate change and all of the issues that you are talking about. In the more arid parts of the Country, especially in New Mexico, there are many entire watersheds, the closed basins, if you will. They are very important resources for all of us, but they never connect to traditional navigable waters.

Now, will this make it difficult if not impossible to prove a significant nexus to the waters based on the Kennedy test and the Agency's new guidance?

Would you talk about that, the water resources in New Mexico, and why are they protected and what is New Mexico done to protect them and where does the Federal Government fit in to help protect them?

Mr. CURRY. Mr. Chairman and Member, in New Mexico, on the area of climate change, just as a note on that because I note that you mentioned that earlier, Governor Richardson set up a task force. The task force was made up of stakeholders from business, from oil and gas which is obviously big in our State, from the dairy industry, from people who are advocates for the environment. They came up with 69 recommendations, 67 of which were passed unanimously by a task force consisting of over 20 people.

Some of these recommendations addressed issues like the clean car standards, clean tailpipe standards. Some of them talked about what we could do to increase our snow pack in northern New Mexico and make sure that we were able to continue to have that. So the climate change issue is very much aware, and we think that we are taking a very forward moving progress on that issue as far as what we can do in New Mexico to address it.

When we look at navigable waters in New Mexico, we find very few, and that is why it is important that we don't consider the waters of New Mexico which cannot be navigated to become second class waters. That is what we don't want.

That is why we support this bill because if this bill does not pass, then New Mexico will not only not have the complete ability to protect its waters like it has for the last 30 years. I believe that our waters will become second class waters just like a second class citizen. I don't think that is good for the next generation or the seventh generation as we look forward.

The Rio Grande is the river that most people who have never been to New Mexico think of. The Rio Grande at one time in our history of our State was a mile wide at the City of Albuquerque. Today, there are times like in Brownsville where the river is less than a yard wide for one reason or another. It was very navigable back in the early history of Albuquerque. It is not now.

There is an occasion raft race down the Rio Grande, but that doesn't mean that we shouldn't protect it. We are protecting the silvery minnow in New Mexico. We are protecting the river for agricultural purposes in New Mexico, and it must be continued to be protected for the historical acequia uses in the State of New Mexico.

The last thing I would say, Member, is that you talk about the shoe in Brownsville. I have had the opportunity to be a commercial balloon pilot, a hot air balloon pilot for 25 plus years in New Mexico. Often times, we had the opportunity to fly our craft into the Rio Grande, and we are happy to call it a splash and dash. Some days when there is no water flowing in the Rio Grande, we refer to it as a mud and thud. It certainly is not navigable at that point.

A lot of times as you move up and down the Rio Grande, what you see are people on air boats moving along much as you see airboats in the Everglades. So we look to keep New Mexico's waters from becoming second class citizens.

Mrs. NAPOLITANO. What role would the Federal Government have in helping you protect them?

Mr. CURRY. Passing this law would be the biggest role that I can tell you right now because with the Federal decisions, we have been left with the morass of uncertainty.

Mrs. NAPOLITANO. Is there anything that would enlighten us?

I chair the Subcommittee on Water and Power. I have a great concern about climate change, about pollution, if you will, because even though we may have enough water in the rivers and in our streams, if they are polluted they are going downstream and hurting somebody or going to endanger the ecosystem or hurt the fish. How are you protecting your streams from that happening?

Mr. CURRY. Member and Mr. Chairman, I want to focus again back on the Rio Grande. We have 19 Native American pueblos along the Rio Grande in New Mexico. Some of those pueblos have attained the ability from the Federal Government to set their own water quality standards, and that has caused some economic concerns.

There is a pueblo of Ysleta that sits south of Albuquerque. There is a pueblo of Sandia that sits north of Albuquerque. The pueblo if Ysleta back in the early nineties set its own standards for water quality, and the City of Albuquerque has to adhere to those standards. So in a very direct yet indirect way the Federal Government, by empowering the Native Americans in our State to set their own water quality standards has helped improve the water quality standards in New Mexico.

The other thing that I would ask the Federal Government to continue to help us on: In the lower Rio Grande in New Mexico, we have a number of studies going on to remove and understand the salinity problems that exist in the lower Rio Grande in New Mexico before it passes over in to become a border river with the State of Texas in Chihuahua. So those two issues, the salinity issue in the lower Rio Grande is very important to the State of New Mexico.

Mrs. NAPOLITANO. Thank you for your indulgence, Mr. Chair.

Thank you, Mr. Curry.

Mr. OBERSTAR. The gentleman from Pennsylvania, Mr. Carney.

Mr. CARNEY. Thank you, Mr. Chairman.

Thank you, Secretary Curry, for joining us today.

Many of the opponents of the clean water protection say that they think that the protection of so-called isolated waters, non-navigable tributaries and many types of wetlands should be left up to each individual State. Often times, however, when States try to pass their own statutes or regulations, many of these efforts are vigorously resisted by polluters.

We understand that the State of New Mexico has recently undergone such a contentious debate and won its case. Congratulations. Can you tell us more about that?

Mr. CURRY. Yes, sir, Member and Mr. Chairman. Through what we have in the New Mexico, the Water Quality Control Commission, we went through an exercise where we essentially tried to decouple the State of New Mexico from the Federal standards. So we would have the opportunity so that we would have a better chance of having our own water quality standards that were separate from the confusion that existed at the Federal level.

We were successful through the Water Quality Control Commission, and then those efforts were appealed to the State Court of Appeals. We prevailed.

At this point, we are in the process of continuing to decouple in that area, and that will give us the authority to continue to do in New Mexico that which we lost in 2001 but what we had been doing for the 30 years, 3 decades, prior to that. It will give us the ability to continue to protect those rivers because of that court of appeals decision. We graciously accept your congratulations.

Mr. CARNEY. Thank you. No further questions, Mr. Chairman.

Mr. OBERSTAR. Mr. Arcuri, no further questions?

Mr. Gilchrest.

Mr. GILCHREST. Thank you, Mr. Chairman.

I guess I would ask the same question I asked the Governor of Montana. Do you see any problems with the Chairman's legislation which will essentially in my judgment, and you can correct me if I am wrong on this, keep intact the jurisdiction of the Corps and EPA for the Clean Water Act over waters of the United States, not change essentially the legal precedents that have evolved over the last so many decades but make it clearer that waters of the United States include tidal waters, non-tidal waters, ephemeral streams, those kinds of things for a myriad of purposes: flood storage, erosion control, sediment control, nutrient management and those kinds of things?

Do you see or foresee any problem with taking that term, navigable waters, out of the Clean Water Act and leaving intact essentially what I think you just described as protecting waters of the United States?

Mr. CURRY. Member and Mr. Chairman, I would say no. We are concerned in New Mexico about ephemeral waters because we have so many areas and so many sources in New Mexico that run intermittently. We want to have the ability to protect those even though they are not navigable. Just on that basis alone, we feel confident in supporting this legislation.

Mr. GILCHREST. Thank you very much.

Thank you, Mr. Chairman.

Mr. OBERSTAR. I thank the gentleman.

Again, the gentleman from Maryland has reaffirmed what our witness today, Mr. Curry, has said and what I have—how should I say—elucidated on numerous occasions and in my opening remarks today, and that is the purpose of the Clean Water Act was stated very clearly in the opening paragraph's definition of terms in 1972: "to restore and maintain the chemical, physical and biological integrity of the waters of the United States." The Act has been interpreted in that broad sense for 30 years.

The Supreme Court, in an activist decision, this group of justices came in saying, well, we don't want an activist court, but then they became one. They overturned the meaning of the Congress in this legislation. They said, no, there has to be a connection to navigability, but for 30 years the Act has been interpreted in this broad sense of the 1972 Act, the waters of the United States.

Deleting the term, navigable, in the body of the Act simply reaffirms 30 years of practice by the Corps of Engineers and the EPA and the States and all their subdivisions in administering this Act. That is purely and simply what I attempt to do with this legislation, what all the co-sponsors want done and what so many others throughout the Country want to accomplish.

To make it clear that we are not expanding this authority, we included Section 6, the savings clause that deals with, that restates all the limitations on the Act that were enacted in 1972.

Now, your statement on the second or third page of your testimony, I think, is so illustrative of the importance of this broad interpretation, and that is your reference to the Salt Basin estimated to contain as much as 57 million acre feet including 15 million acre feet potable. But if the aquifer, you say, is allowed to be polluted by surface dumping, its benefits for future New Mexicans will be severely curtailed.

Now that dumping could come from an intermittent stream above that basin or in another State that only a few weeks or a few months of the year is an operating body of water in which you could float a boat, a canoe maybe or pirogue if you are in Louisiana. Yet, toxics dumped into that water could get into this aquifer and poison it. Isn't that what we are trying to get at?

Isn't that what the purpose of the 1972 Act was to give the Federal Government, give the State Governments authority to prevent such pollution?

Mr. CURRY. Mr. Chairman, I concur completely. I can think of an example if you would bear with me.

In Albuquerque, about three years ago, there was an oil spill in the south valley of Albuquerque. It was a relatively small spill, several thousand gallons, and it came from a used oil company. It ran down, and it was within a mile of the Rio Grande in Albuquerque. It ran down a concrete ditch. When the concrete ditch ended, it ran into a dry arroyo, a dry earthen ditch.

We looked around, and we were concerned that we didn't have the authority to go in there with the proper enforcement activity to get after the particular polluter involved in this. We ended up using some other acts within our State's ability to get in there to ensure that we got it cleaned up. There was, if I remember, a small penalty, but our concern was getting it cleaned up so that it would not go from the arroyo into the Rio Grande. That is an example of what you speak, of what we are trying to do.

Mr. OBERSTAR. I greatly appreciate your thoughtful and wise testimony and the experience of your State. We particularly appreciate the views of the governors who represent those arid regions of the Nation for whom water is so precious and whose protection is so critical. Thank you very much for your contribution today.

Our next panel includes Professor Robert Percival, the Robert F. Stanton Professor of Law from the University of Maryland, Professor Kim Diana Connolly, University of South Carolina School of Law, and Mr. Reed Hopper of the Pacific Legal Foundation.

We welcome you all and thank you for being with us today and for your contribution. I have read your testimony, respective testimonies previously, and I am very impressed with your thoughtful presentations.

Professor Percival, we will begin with you.

TESTIMONY OF ROBERT PERCIVAL, ROBERT F. STANTON PROFESSOR OF LAW AND DIRECTOR, ENVIRONMENTAL LAW PROGRAM, UNIVERSITY OF MARYLAND; KIM DIANA CONNOLLY, ASSOCIATE PROFESSOR OF LAW, DEPARTMENT OF CLINICAL LEGAL STUDIES, UNIVERSITY OF SOUTH CAROLINA SCHOOL OF LAW; M. REED HOPPER, PRINCIPAL ATTORNEY, PACIFIC LEGAL FOUNDATION

Mr. PERCIVAL. Chairman Oberstar, Congressman Baker and Members of the Committee, thank you for inviting me to testify today.

I am Robert Percival, the Robert Stanton Professor of Law and Director of the Environmental Law program at the University of Maryland School of Law.

The topic of this hearing is extremely important. The U.S. has been a world leader in environmental law. During the 1970s and 1980s with overwhelming bipartisan support, Congress enacted landmark legislation to protect the environment. Due to the foresight of those Congresses, our water and air are much cleaner and our citizens are safer and healthier than in countries that only belatedly developed environmental laws.

Yet now, 35 years after enactment of the Federal Water Pollution Control Act, we find some of the most fundamental premises of our environmental laws under assault in the courts. The sharply divided Supreme Court has created confusing new loopholes in the vital legal infrastructure that protects our environment, and it is essential that Congress repair our legal safety net.

There are four basic points that are covered more extensively in my written testimony that I would like to emphasize in my brief oral statement today.

First, Congress properly recognized in 1972 that a comprehensive approach would be necessary to protect the Nation's water. Thus, it intended to exercise the fullest extent of its constitutional powers when it adopted legislation requiring permits for all discharges of pollutants or dredged or filled material that would degrade the Nation's waters.

Second, initially, the courts—and for 30 years nearly—properly recognized that Congress had acted wisely when it entrusted the U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency with the responsibility to implement this program. Thus, in its 1985 Riverside Bayview decision, the Supreme Court unanimously deferred to these agencies in upholding the broad application of the Clean Water Act to wetlands not contiguous to open waters.

Third, as a result of two sharply divided Supreme Court decisions, one 5-4 and the other 4-1-4, SWANCC in 2001 and Rapanos in 2006, every one now agrees that confusion reigns over the scope of Federal jurisdiction to protect the Nation's waters. This confusion benefits no one and can only be dispelled by the adoption of new legislation clarifying the scope of the Act.

Fourth, Congress has ample constitutional authority to restore the Act to its initial premises.

As a result of the SWANCC and Rapanos decisions, the most fundamental question one asks about any regulatory statute—to what does it apply—is in a state of confusion today. This confusion threatens to undermine not only the particular program challenged in those cases, the Section 404 program to protect wetlands, but also other programs that rely on the same jurisdictional term, waters of the United States. These include the Section 402 permit program for point source discharges of water pollutants and the Act's oil spill prevention program.

Rapanos has produced the bizarre result that the law currently defining the scope of Federal jurisdiction reflects the views of a single Justice that were rejected by each of the eight other Justices. Moreover, no one seems to know how to apply the significant nexus test created by Justice Kennedy in this case. This has spawned new legal challenges and enormous uncertainty.

In light of the enormous confusion created by the Court's 4-1-4 split in Rapanos, Congress should amend the Act to clarify the scope of Federal jurisdiction. The simplest approach would be for Congress to return to the scope of Federal jurisdiction under the Clean Water Act which prevailed for 30 years prior to SWANCC and Rapanos.

This approach should command bipartisan support because it would endorse the very interpretation of the waters of the United States so ably advanced by the Bush Administration's Solicitor General in the Rapanos cases. This approach would also have the virtue of ensuring that agencies need not revise their regulations that predate SWANCC and Rapanos. It would promote legal stability by retaining long-held interpretations well known to agency officials and the private Bar.

When I was a law clerk to Justice White, who was the author of the unanimous decision in Riverside Bayview, he once said to me he couldn't understand why some justices believe that what Noah Webster had in his mind when he came out with this first dictionary in the 19th Century was more important for statutory interpretation than what was in the minds of the Members of Congress who passed the actual legislation. I suggest that those are very wise words.

When Justice Scalia responded to the criticism that his extreme view in the Rapanos case would be very damaging to the environment, he essentially said: So what? It is not my fault. Congress did not speak clearly enough.

I urge you to take this opportunity to speak clearly by amending the Act to restore it to the long-held interpretation prior to these two decisions.

Thank you, Mr. Chairman.

Mr. OBERSTAR. Thank you for those very enlightening remarks and for that explicit insight into the mind of Justice Scalia. Thank you.

Professor Connolly.

Ms. CONNOLLY. Mr. Chairman, Congressman Baker, distinguished Members, good afternoon. It is an honor and privilege to be here today.

My ultimate message will boil down to one important truth. Congress must take immediate action and enact legislative language to straighten out the mess that regulating wetlands and other waters in the United States has become in recent years.

You can read more about my background in my written submission, but it might be interesting to know that I have come to this conclusion after years of work including practice here in Washington, D.C., representing the regulated community as well as scholarly work.

Your staff has prepared an excellent background paper, and Professor Percival has provided coverage of crucial points. So I am not going to go over these remarks about the current state of the law. I do want to make a couple of other important points.

Wetlands and other waters differ depending on locations due to a variety of factors including soil differences, topography, climate, hydrology, water chemistry. Yet, regardless of their differing nature, scientists have demonstrated that adjacent wetlands, tributaries of virtually of all types and headwaters are inseparably bound up with other waters. Through their connectivity, they are essential to the maintenance of the quality of our Nation's waters.

I believe that in 1972 and again in 1977, Members of Congress did their best to set forth a clear path for what the Clean Water Act should cover in terms of navigable waters. As I argued on behalf of a bipartisan group of current and former Members of Congress in a Supreme Court brief in the Rapanos case that I was privileged to co-author last year, it is clear the intent of Congress when passing the Clean Water Act was to embrace the broadest possible definition of navigable waters when it defined that term as all waters of the United States.

You have read in your staff-prepared memo about the Riverside Bayview Homes case. You have read and heard today about the Solid Waste Agency case. The subsequent legal interpretations of the 2001 Solid Waste Agency decision by various courts did find it to be very narrow in most cases.

But the agencies gave mixed signals as to how they were going to proceed in dealing with the areas of jurisdiction. GAO studies demonstrated there was confusion among Corps staff. Stakeholders on both sides continued to battle in interpreting the geographic jurisdiction.

During these years, the first and second Clean Water Authority Restoration Acts were introduced in Congress, and some good progress was made, but perhaps because of the then leadership, those legislative efforts did not receive the attention that I think they deserved.

But it has become more important. The United States Supreme Court got involved again, leading to the most recent set of opinions that we have heard about today in the consolidated Rapanos and Carabell cases. These are very, very academically interesting cases. They leave stakeholders, except for law professors who like to write about these kinds of things, without much comfort.

Now we have got guidance. We have got this set of guidance that the Corps and EPA has put out almost a year later to interpret how the term, navigable waters, should be read in the field, but I use the term guidance loosely. It does not read as a document I would find very guiding if I were an EPA or Corps employee trying to make a particularized decision in the field with respect to a particularized permit application. It leaves more questions unanswered than answered.

As the frontline regulator, the Corps processes close to 90,000 permit applications and 100,000 jurisdictional determinations a year. Significantly, less than 1 percent of permit applications are denied. So the odds are if you apply for a permit that you want to undertake development in waters of the United States, you are likely to receive such a permit. Admittedly, it will require some investment of resources, take some time, but at the end of the day you are likely to get your permit and be allowed to undertake activities.

Recent research that I did and was published in an article in the Environmental Law Reporter shows customer service surveys filled out by thousands of permit applicants after undertaking the process of going through this Corps process show that they are happy, if not delighted, with the permitting process. Though some applicants express concern about the time the permit process requires, a few others have some other complaints, an impressive percentage give the Corps perfect marks in their overall ranking of the permitting experience.

So, contentment with the current system? Yes, but it is my belief that Congress must act, must amend the Clean Water Act now.

I personally believe that the bill before this Committee could have gone farther. I think that it might have wanted to deal with the so-called Tulloch Rule interpretations of the term, discharge, maybe even mitigation, but I think it is an important step.

I am aware that there are some who question constitutionality of the pending legislation. I will not belabor the point here because of time constraints but simply state it is my belief that this proposed legislation is constitutional.

Finally, in closing, I want to reiterate something I wrote to conclude a recent piece published in a book of essays. My essay was looking into whether there could be a happy ending in the jurisdictional debates. I wrote there: It seems to be precisely some new magic words from Congress that are needed to rectify the situation. H.R. 2421 contains appropriate words to bring us closer to happily ever after when it comes to our Nation's waters.

Thank you.

Mr. OBERSTAR. Thank you very much for your thoughtful and well expressed testimony.

Mr. Hopper, welcome and you are recognized.

Mr. HOPPER. Thank you, Mr. Chairman.

I think that the best indicator of Congressional intent is to be found in the language actually adopted by Congress. After all, this is what the Federal officials have to work with, the regulated public and the courts themselves.

As you have noted, Mr. Chairman, the broad statement of the objective was clear. The objective of this Act indicated, as you mentioned in the first line of the Clean Water Act, it was to restore and maintain the integrity of the Nation's waters.

However, in the next line, Congress adopted this language: In order to achieve this objective, consistent with the provisions of the Act, the national goal is to eliminate discharges into the navigable waters.

The other provisions referred to here of Section 404 and other provisions of the Act used these terms, navigable waters and waters of the United States, which had been employed in previous acts and for 150 years did have a settled meaning, meaning actual navigable channels. These same terms were employed in the Clean Water Act without being redefined.

In addition, on the same first page of the Act, Congress indicated another objective which was to recognize as a policy of Congress that it is the primary responsibility and rights of States to prevent, reduce and eliminate pollution and plan the development and use of land and water resources.

Still, for 30 years, no consistent jurisdictional standard was applied by the Corps. This was proven in a GAO audit in 2004 in which the GAO reported and demonstrated that if you take any three officials from a Corps district office, you will get three different interpretations as to the jurisdiction of the Corps.

In ensuing years, we had the development of the Supreme Court decision, Riverside Bayview, which indicated a broad authority under the Clean Water Act followed by SWANCC which implied a narrow authority under the Clean Water Act. We had split decisions.

So to clarify the Federal jurisdiction under the Clean Water Act, we brought the case of Rapanos to the United States Supreme Court. We did not get the clarity we had hoped. As is clear now, we have a 4-1-4 split.

We have the dissent, four justices indicating that anything goes. All water should be subject to Federal control. We have Justice Kennedy in his lone concurrence, providing for a jurisdictional standard under his significant nexus test. Then we have the four in the plurality who suggest that the jurisdiction should be limited to relatively permanent traditional standard type of streams, lakes and rivers and abutting wetlands that are inseparably bound up.

There has been a three-fold response on the Federal level. The courts now are split again. The Seventh Circuit in the Gerke case and the First Circuit in the Johnson case have come at loggerheads as to how to understand or interpret the 4-1-4 split in Rapanos. We have the Seventh Circuit that says that the Kennedy approach is controlling along with the Ninth Circuit. We have the First Circuit saying that Federal jurisdiction could be established under either the Scalia plurality or the Kennedy significant nexus test.

Then we have, as was already mentioned, the reference to the new agency guidance, which is anything but. It means, I think, business as usual. What the Corps will not regulate categorically, it will regulate under the significant nexus standard. We think that this is a pro forma test because the Corps of Engineers is already on record as arguing that all wetlands and indeed all waters are significant.

That brings us to the current state of affairs where we have the proposal here of the Clean Water Restoration Act. The language in this Act suggests that Congress would exercise authority over all intrastate waters and with the exception of the farm exemptions that are mentioned, it would intrude, I think, in an unprecedented way into States' rights.

I think it far exceeds any reasonable interpretation of the language that was actually adopted in the Clean Water Act. I think it does exceed the current regulations, and I think in addition it raises constitutional questions. Under current Supreme Court commerce clause analysis, it is unlikely that this broad reach would be sustained.

Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Hopper, for being with us and for a contrasting view on this subject. I know you argued before the Supreme Court on the SWANCC case. Am I correct?

Mr. HOPPER. Yes, that is correct.

Mr. OBERSTAR. You do refer in your testimony and you repeated a moment ago to the intradistrict inconsistencies and the interdistrict disagreements, but most of those were post-SWANCC case where there was a great deal of confusion sowed.

Not to say that the Corps in all of its districts throughout the Country has had a consistency, a slavish sort of consistency to interpretation of the Clean Water Act. To be sure, there are differences in the way the Act was applied. Those differences, in my experience sitting in hearings in this Committee over 33 years now, are because of differing conditions within the various Corps districts.

But in your view of consistent application of the Clean Water Act, does the body of water have to be navigable? That is one on which a boat can be operated even down to a canoe?

Mr. HOPPER. Are you referring to what the Supreme Court has now decided under the Rapanos decision?

Mr. OBERSTAR. Your view of the Act. You have read the Clean Water Act. You argued the case. You know it. Tell me what your view is, not the Supreme Court's views, your view.

Mr. HOPPER. Well, we thought that the Supreme Court was correct in the SWANCC decision when the Court looked at the history of the Act, looked at the legislative structure and the language of the Act and concluded that Congress did not intend to exercise anything more than its power over navigation. We think that was a correct reading of the Act as written.

However, the Supreme Court has come to a different conclusion under the Rapanos decision. Even the plurality has backed off of SWANCC and given a broader reading than appeared to occur with the SWANCC decision.

Mr. OBERSTAR. You would not insist on navigability. That is actually assuring that the smallest water conveyance would have to operate on the water in order for authority to be regulated.

Mr. HOPPER. That is correct. I would not insist on that, and I don't think that the Supreme Court now does under any reading of the Rapanos decision.

Mr. OBERSTAR. I have read so much in the aftermath of the Supreme Court decisions, so much commentary about the Act and how it has been interpreted before I crafted the legislation pending before us. I marvel at various commentators' view of what Congress intended.

First of all, there is the very plain language of the Act. Secondly, there is the very plain application of that Act over a period of 25, 27 years until the SWANCC case. How the Court could have gotten so far off base is a puzzlement to me.

I sat right here in this room. We negotiated for 11 months with our Senate counterparts on the provisions of the Clean Water Act. It was very clear to us as staff and then to our principals, the Members of the House and Senate, that they wanted a departure from the past, from the Federal Water Pollution Control Act of 1956, 1961 and subsequent, that clearly it wasn't doing the job. We weren't getting at the problem.

You had to deal with watersheds. You had to go to the source. You had to go to protect particularly the wetlands, the marshes, the peat bogs which are the filtering agents, the coastal wetlands that are the buffering agents against storms to give this Act the broadest authority to clean up our waters.

The term, navigable, stayed in the Act in various places because we were recycling the 1899 Rivers and Harbors Act or also known as the Refuse Act. Thirty years of practice ought to mean something, but apparently it didn't for that first court case.

Mr. HOPPER. You do recall, Mr. Chairman, that in SWANCC the Supreme Court pointed out that in 1974, two years after the passage of the Federal Water Pollution Control Act, that the Court interpreted the term, navigable waters and waters of the United States, to mean traditional navigable waters and said that the Corps got it right then, the correct understanding of the intent of Congress.

I would differ with you about this so-called 30 years of consistent application. The fact is that the Corps has never defined the word, tributary. This was a bone of contention in the Rapanos case. This was a free-wheeling definition, ever changing.

Originally, the Corps just disclaimed any jurisdiction over ditches and the like. Then now suddenly only in the litigation in the Rapanos case, for the first time, did we hear the Government arguing that navigable waters and waters of the United States meant anywhere water flows regardless of its impact on downstream navigable waters. That was not a 27 or 30 year consistent application or interpretation of the law. That was ad hoc.

Mr. OBERSTAR. You are right. Initially, the Corps didn't quite know what to do with this new authority. They were puzzled about what to do with the much broader authority the Congress intended for them, and they stumbled around.

Then they published a set of regulations on Section 404 which is two paragraphs, and they produced 34 pages of regulation in the Federal Register which one of my colleagues called the Miracle of the Loaves and Fishes, the multiplication of terms, but the Act was implemented.

Now, Professor Percival, you say and rightly so that more than 98 percent of the Nation's waters are not navigable and, in fact, the quality of navigable waters is significantly affected by pollution entering their non-navigable tributaries. Can you protect waters of the United States without having a broad interpretation?

Mr. PERCIVAL. No, absolutely not, and that is why Congress intended to be as comprehensive as possible.

I would just commend to the Committee for historical purposes the excellent article written by Lance Wood who has been legal counsel to the Corps for all these years, that was published. It is cited in footnote 31 of my testimony and was published in the Environmental Law Reporter in 2004.

He specifically responds to what he deems the misguided notion that that original 1974 interpretation by the Court should carry any weight at all, given that they were doing precisely what you just indicated that they were doing. It was their first cut, and they didn't really think about it very much.

It is now absolutely clear that unless you have a broad interpretation of the jurisdictional scope of the Clean Water Act, it is not going to accomplish what Congress intended because polluters will simply be able to move further upstream, dump their pollutants and escape all Federal jurisdiction.

Mr. OBERSTAR. Thank you.

What this legislation is turning into is something I didn't intend and didn't foresee—maybe I should have—that it was going to unleash a great redebate over the Clean Water Act. That is a good thing. That is a healthy thing.

Before I go on to Mr. Baker, let me ask. From the standpoint of the Constitution, is the commerce clause authority of the Congress limited to traditionally navigable waters, Mr. Hopper?

Mr. HOPPER. No, I think it is clear that it is not. Under the recent Supreme Court decisions of Lopez and Morrison, the Court has adopted a standard whereby commerce clause jurisdiction can be established if the activity that is regulated substantially affects a traditional navigable water, and so I think that is the standard now.

I do not think that the bill that is proposed would pass muster under those standards, but you are correct to say it is not limited to channels.

Mr. OBERSTAR. Thank you.

Professor Connolly?

Ms. CONNOLLY. I believe that the bill as proposed would pass muster. I think that it is clear that when you look at the jurisprudence of the commerce clause, particularly in the environmental setting, there hasn't been a Court decision that has found that there has been overreaching.

I think that what you have done in the bill is very clearly set forth that the tests that currently exist in the constitutionality under the commerce clause and other sections of the Constitution that are impacted by this are met by this standard and that Congress clearly has the authority to regulate activities in waters under the Constitution.

Mr. OBERSTAR. Professor Percival?

Mr. PERCIVAL. I would just emphasize that even Justice Rehnquist, who is the architect of the Court's new jurisprudence limiting Congressional power in the commerce clause as far back as 1979, conceded in the Kaiser Aetna case that Congressional authority over the waters of this Nation does not depend on a stream's navigability, that if you are really trying to protect the waters of the United States, Congress has very broad powers.

I would just add that it is certain that this bill could not be unconstitutional because your objective is simply to extend Federal authority to the limit of Congress' powers, so it is almost a tautology. Congress is not saying that we are going to exceed our constitutional powers. It is just that you are going to give the Corps and EPA as broad authority as is possible under the Constitution, and it is undoubtedly the case that the Corps' longstanding regulations would satisfy those constitutional tests even under the Court's current constitutional jurisprudence.

Mr. OBERSTAR. Thank you very much.

Mr. Baker.

Mr. BAKER. Thank you, Mr. Chairman.

For the sake of defending the Court's honor, I want to revisit just briefly judicial and regulatory history on the matter, Professor, and ask your comment as to where you think I might have missed it.

In the case of the 1972 amendments, I will refer to as the Act, when you look to the Act and as to the definition of navigable waters, it simply states the waters of the United States including the territorial seas and there is no further clarification at that point.

In looking to legislative guidance in the matter, I read with interest the Floor remarks of Senator Muskie, a Democrat from Maine, who made the following statement, and I read an excerpt acknowledging that.

"One matter of importance throughout the legislation is the meaning of the term, navigable waters of the United States The conference agreement does not define the term. The conferees fully intend the term, navigable waters, be given the broadest possible interpretation unencumbered by agency determinations which have been made or may be made for administrative purpose."

Everybody gets excited when they hear that, but they have got to read the next line. That statement is made in the context of the debate forum in which they were in. At that time, there were navigable waters not subject to jurisdictional claim.

"Based on the history of consideration of this legislation, it is obvious that its provisions and the extent of application should be construed broadly. It is intended the term, navigable waters, include all water bodies such as lakes, streams and rivers regarded as public navigable waters in law which are navigable in fact."

So the Senator made a statement which, to me, makes clear that in the context of the regulatory regime in 1972, there were in fact navigable waters not subject to the Corps' jurisdiction, and he was making a statement of clarity that the Clean Water Act was to extend that jurisdictional reach to all navigable waters at that time.

We go on. Pursuant to the actions of the Congress in the adoption of the 1972 Act, the EPA and the Corps then proceeded to take two differing approaches in interpreting the legislative direction. The EPA navigable waters definition was much broader. I won't read that. I will go on for time's sake.

The Corps, on the other hand, rejected the EPA's broader interpretation and viewed the Clean Water Act as requiring it to assert jurisdiction over all the traditional navigable waters including those traditional navigable waters that it had previously declined to regulate.

That seems to legitimate the Senator's view that expanding the jurisdiction was, in essence, expanding it to navigable waterways, not to, at this point, isolated wetlands. We get to that down the road.

The National Resources Defense Council then, in response to the Corps' definition in 1975, filed in district court a D.C. action which the Court then ordered the Corps to develop regulations clearly recognizing the regulatory mandate of the Water Act. It did not specify what that action was, but it said do better than where you are.

It took the Corps a while, until 1977, before the final rule was issued. By that time, the EPA had taken additional aggressive actions through regulation expanding and continuing the inconsistencies between the Corps and the EPA because the Corps could not catch up to the EPA because of the slowness of their rule promulgation.

In 1985, the Court, pursuant to Riverside Bayview Homes case, seemed to give a victory back to the EPA, requiring wetlands regulation but that directly abutted open navigable waters consistent with the Clean Water Act. So we still have at the root of the definition as of the Riverside case a basement using navigable waters but extending the Clean Water Act reach now to wetlands abutting a navigable waterway or a distributary to that waterway.

SWANCC comes along. For those who have not—I think for purposes of record—had the delightful time sitting down, reading that a page at a time should know that this was a gravel strip mine which had trenches left by the mining that resulted in the formation of seasonal ponds that were from a tenth of an acre to several acres in size on which migratory birds would nest in the season.

The Supreme Court concluded in that case that the Corps had extended beyond its jurisdiction in enforcing the migratory bird rule in this instance. After evaluating the plain meaning of the statute and the contemporaneous interpretations of the Corps as well as its own precedent, the Court found the migratory bird rule to exceed the Corps' jurisdiction over the plain language of the CWA. The CWA grants jurisdiction only over navigable waters, so we get that same repeat language.

What I am trying to establish for the record is that this Court did not wake up after drinking bad water and come up with this navigable waters idea. It started from the Floor statements of Senators during the course of legislative consideration and is replete with repetitive explanation through the jurisprudential record.

Then we move on to Rapanos, and even there we find that the regulation of wetlands with a continuous surface connection to a tributary to a navigable water body. We still can't get away from it.

Now I am not a purist when it comes to legislative construction. The goal here is to provide enhanced regulatory authority for the Clean Water Act over all land, all waters anywhere. It is my reading of it that if we were to have a rainstorm this afternoon and a few inches of water would accumulate on top of that very expensive visitors center, that that would classify it, at least for the purposes of this activity, as a wetland subject to jurisdiction claim.

Do you see in the history that I have recited to you an inconsistency in the defense of navigable waters as a basic building block through which the Court, District and Supreme, have always looked at the critical right for extension of the provision of CWA authority?

Mr. PERCIVAL. I think you have done a very good job, but I don't think you have given the complete picture. You have done an excellent job of pointing out why navigability has caused so much confusion over time.

Mr. BAKER. I wish you would stop there. That would be better, but go ahead.

Mr. PERCIVAL. It is important. It is important to bear in mind, though, that what Congress did do in 1972 is it defined navigable waters to mean waters of the United States, a term of art whose meaning was to reflect the desire of Congress to have it as comprehensive as possible.

Mr. BAKER. But that is all they said.

Mr. PERCIVAL. Right.

Mr. BAKER. They said navigable waters, and that is it.

Mr. PERCIVAL. That is all they said in the text of the Act.

Now I think the Supreme Court got it exactly right in Riverside Bayview when it looked carefully at the legislative history, carefully at the debates that you looked at and noted that the purpose of Congress was to do more than just protect navigability. It was also to protect water quality and that required deference to the

Corps' judgment that you also needed to include wetlands that had hydrologic impacts on the quality of traditionally navigable waters.

Mr. BAKER. That was a provision in the holding which said you could literally walk from waste-deep wetlands directly to the navigable waterway, but the holding was because of its association with a navigable waterway, not that it was principally a wetlands. It was wetlands with a navigable waterway that led them to their conclusion. Is that wrong?

Mr. PERCIVAL. Well, the Court also, Justice White in his opinion said that Federal jurisdiction over adjacent wetlands was not dependent on the flow of water between wetlands and traditionally navigable waters but rather the fact that in the judgment of the Corps, they had an impact on those other waters.

Mr. BAKER. They shared certain hydrologic conditions.

Mr. PERCIVAL. Here is his quote: "The wetlands adjacent to lakes, rivers, streams and other bodies of water may function as integral parts of the aquatic environment even when the moisture created in the wetlands does not find its source in the adjacent bodies of water."

Now, just one final point and that would be the visitors center. It is not a wetland. It doesn't meet the Corps definition of wetlands. There is no conceivable way, no matter how hard it rains here, that Federal jurisdiction would be extended to the visitors center.

Mr. BAKER. But that definition is not statutory and it is really unclear if we were to go to the record and look at what the Corps has declared as a navigable waterway.

Mr. Chairman, I am going to enter this one into the record. I will get the source for it. I just happen to have it in my file.

Mr. OBERSTAR. Entered into the record without objection.

Mr. BAKER. I thank you, Mr. Chairman.

The title says Regulated Navigable Waters in Elk Grove, California, and it is just this little trench created by the farmer which is fenced on either end. So it would be a very short haul for a commerce operation. I can't remember off the top, but I know it is less than five inches a year annual rainfall. That is already a wetlands.

That is the operational concern that I have, sir, is not that we shouldn't protect aggressively all environmental resources, but the unintended consequence of a bureaucracy let loose with the authority of law to back them will take private property rights without compensation almost at will. I know that is a reach for some who are strongly advocates of this position, but I think it is one equally strongly held by those who have been the recipient of these judgmental determinations.

I thank you for your courtesy. I have gone on too long. Thank you.

Mr. OBERSTAR. No. The gentleman has time.

Mr. BAKER. I am fine. What I would like to do, Mr. Chairman, is I will put that little diatribe into a memo and deliver it to the Professor for further analysis.

Mr. OBERSTAR. That was a very thoughtful legal analysis that falls somewhat short, but I would instruct the Clerk to print the gentleman's remarks upside down. It was too good for the record.

[Laughter.]

Mr. BAKER. I thank the Chairman for his kind comments. Living in Louisiana means you are upside down. So I take no offense.

Mr. OBERSTAR. Well, my wife is from Louisiana.

Mr. BAKER. I strike that from the record then.

[Laughter.]

Mr. OBERSTAR. And the Mississippi rises in my district or just outside my district and finishes in her town.

Professor Connolly.

Ms. CONNOLLY. Just I would commend to you the brief that I had the opportunity to co-author that goes into the legislative history. In addition to some of the quotes that you have, there are some additional quotes that you might want to look at as you are considering the legislative history here.

Mr. OBERSTAR. It was my intention, without objection, to include in the Committee record Anchoring the Clean Water Act of the Environmental Law Institute. I think it is a very cogent document.

Mr. Hopper, did you have comments on what Mr. Baker said?

Mr. HOPPER. Yes, I did if I could just make a comment on Mr. Baker's comments.

I agree with Professor Percival that water on the roof is not a wetland, but it doesn't need to be a wetland in order to be regulated, and that is the key point. We have been engaging in a long debate about how clear the language of the statute is, and what is clear about the bill is that it applies to all intrastate and interstate waters, all waters. It is just as clear as the Chairman believes that navigable waters and waters of the United States was in 1972.

I would also remind Professor Percival that it is a matter of established judicial canon of statutory interpretation that a contemporaneous interpretation is given more weight than a subsequent interpretation, and so therefore the 1974 interpretation of the Clean Water Act by the Corps is not to be set aside so easily. It was contemporaneous.

Mr. BAKER. If I may, Mr. Chairman.

Mr. OBERSTAR. Certainly.

Mr. BAKER. Just as a quick follow-up, let me see if I understand your constrained definition of isolated wetland.

Were it in fact, for example, where a farm tractor cuts across a field, where the field itself prior to the crossing was not deemed wetlands by the Corps, you have the residual tire marks that subsequently fill with water. There are cases where those marks or that area has been defined as wetlands. Do you think that jurisdictional reach is appropriate or inappropriate?

Mr. HOPPER. Oh, it is inappropriate. I think that you are right. We have seen some bizarre interpretations of what constitutes of what constitutes a wetland.

Mr. BAKER. Well, but there may be some middle ground here. I am not opposed to protection of waters, but what I am suggesting is there have been, as you have acknowledged, determinations that are not cemented in logic.

Mr. HOPPER. Oh, absolutely.

Mr. BAKER. For example, in construction of the interstate between Baton Rouge and Lafayette, there were isolated wetlands that were maintained by the contractor during the constructed of the elevated interstate, but when he left, those died. They were not wetlands of a permanent or natural nature. They were creations of the construction effort.

Those are the kinds of concerns that practical people have about the extension of this authority in an unbridled fashion. If there are ways you can suggest to better clarify without extraordinary overreach.

I am not suggesting that the Chairman's bill isn't going to pass as it is. He can pretty much do what he chooses here, but if there is a way to suggest a modest improvement in a definitional arena, I certainly would like to explore that with you.

Mr. HOPPER. I can think of no modest improvement. I can suggest an improvement.

I think clearly if you are going to, this Clean Water Restoration Act, as proposed, simply says we are going to regulate all waters until a court says we can't. That is what it says, and it will cover all waters. All right, now.

Mr. BAKER. Except on the visitors center.

Mr. HOPPER. No. It will cover that. It will cover that on the visitors center, but it won't be called a wetland.

Mr. BAKER. Okay.

Mr. EHLERS. Will the gentleman yield?

Mr. BAKER. I would be happy to yield, yes.

Mr. EHLERS. I would have to agree with the professor from the State of Maryland. This area over here would not. The visitors centers is not going to meet the test of hydrology, of soil type or vegetation. So the visitors centers is not now or ever will be considered a wetland or a non-tidal wetland.

Mr. HOPPER. But if I could finish with my recommendation.

Mr. BAKER. I reclaim my time.

Mr. HOPPER. I think that this bill, as proposed, simply puts us in another round of intense litigation. I am volunteering. I do not think that this would pass constitutional muster.

Now I think that if we want to adopt a standard that is respectful of States' rights and avoids a lot of the problems with intruding on the takings clause and property rights and still is protective of waters, I think that I would recommend adoption statutorily of the standard put forward by the Scalia plurality.

Then I think what we need to do is continue our efforts with the States. The way I read the Clean Water Act of 1972, Congress intended to rely on the States to regulate at the source upstream whereas the Federal Government regulates downstream in the navigable waters. That is an entirely rational approach to address a nationwide issue. I think that we need to rely on greater States' rights.

In addition to trying to protect the environment for future generations, we also want to protect the constitutional structure for future generations. The rule of law is an important thing as well.

Mr. BAKER. Thank you.

Mr. OBERSTAR. Before I go to Mr. Carney, we have heard a lot of discussion about Congressional intent, and I would just like to enter into the record at this point the Committee report from this Committee when we reported the bill from Committee to the House Floor and before going to conference.

"One term the Committee was reluctant to define was the term, navigable waters. The reluctance, however, was based on the fear that any interpretation would be read narrowly. This is not the Committee's intent. The Committee fully intends that the term, navigable waters, be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."

That is Congressional intent. That is what the Supreme Court ignored.

Mr. Carney.

Mr. CARNEY. Thank you, Mr. Chairman.

Mr. Hopper, I guess I need you to help me follow a couple things here.

In the very first sentence of your testimony, you assert that, and please let me quote you: "In over 30 years of enforcement of the Clean Water Act, agency officials were never able to provide a predictable consistent standard for Federal jurisdiction."

Mr. HOPPER. That is correct.

Mr. CARNEY. You then go on to support this sentence with reference to the 2004 GAO report. Now, while you imply that the report supports this 30 year record, you do not make any references whatsoever to the time period actually covered in the GAO analysis, interviews that took place over a 10 month period regarding the less than 3 years following the SWANCC decision.

Could you please explain how the time period assessed in the GAO report, 2001-2004, accounts for that 30 year period?

Are there non-anecdotal references to the Committee that supports the 27 and some years you refer to in the first sentence?

Mr. HOPPER. I don't think I can cite to you any non-anecdotal references. I am not sure what you are asking with respect to this three year time frame.

All I am suggesting is that, in both the SWANCC and in the Rapanos decision, the pluralities and the majority castigated the Corps for its ever changing regulatory framework. The migratory bird rule was adopted subsequent to the regulations that now exist. It was an underground regulation. It was never formally adopted, but it was followed and used.

The Corps has specifically disclaimed in formal regulations that it does not have authority to regulate certain discharges and certain types of ditches, drainage ditches and the like. But, subsequently, it asserted authority over that.

Let me just point out that with respect to SWANCC even though it was quite clear.

Mr. CARNEY. It has done this over 30 years in other words.

Mr. HOPPER. Well, if it were consistent over 30 years, it wouldn't have been inconsistent in the past 3 years or 5 years or 10 years.

Mr. CARNEY. Basically, you are saying over 30 years using a 3 year period to mark 30 years of inconsistency, is that right?

Mr. HOPPER. I am just saying that in the 30 years experience that the Corps has had to enforce, it has not come up with a consistent jurisdictional standard.

Mr. CARNEY. I see, okay.

Professor Percival, do you care to weigh in on that.

Mr. PERCIVAL. Yes. I have read the GAO report, and the whole motivation behind having the GAO do the report was to find out how the Corps was responding to SWANCC. So, if anything, it actually supports the notion that SWANCC is the source of any inconsistencies that are referenced in that report, that the Corps didn't understand what its limits were for the scope of Federal jurisdiction, and that is why the report documents cases where they are applying different interpretations.

If anything, that reinforces the case for going back to a pre-SWANCC interpretation as the Chairman's bill would do.

Mr. CARNEY. Thank you.

Professor Connolly?

Ms. CONNOLLY. Yes. I think that I have to pleasure every summer of working with Corps employees, teaching them an environmental laws and regulations course. So I actually get to meet with people who are in the field, trying to work with these regulations on a regular basis, and I have the utmost of respect for the employees who are trying to do this.

As the Chairman pointed out, waters are different in different places, and there does need to be some different interpretations.

The other interesting thing when you are looking at the data, I think that SWANCC put things into a very different perspective and that there was a lot of confusion.

I think the GAO report. I was privileged to help prepare the folks who were doing the GAO report, and I know exactly what they were focusing on. They were trying to figure out what was happening in the field then.

There has been an additional data call, and there are additional data that the Corps has gathered. It shows that, yes, there is confusion, and that is precisely why this legislation is needed to help the folks who are in the field, to help the folks who are in the permitted community, to help the folks who are all stakeholders figure out where go to from here.

Litigation about this will continue absent some sort of directive, and it will continue to be a mess. There needs to be a directive from Congress to help us get past where we have gotten in light of these two Supreme Court decisions.

Mr. CARNEY. Mr. Hopper, would legislative clarity clear up this cloudiness, do you think or, no, it will create more? What is your impression?

Mr. HOPPER. Well, if the legislation were clear, then it would help, I suppose. I don't see it. I don't see that with this proposal. I mean it is clear that if it were adopted, it says we will regulate all waters. I mean that is clear.

However, again, I think that that will only last until the Court has addressed it. It invites. Because the legislation says we are going to regulate to the fullest extent of the law, it invites the Court to determine what that full extent is. I suggest that is an abdication of the Congressional role. Congress has its own responsibility to determine the reasonable limits of its constitutional powers.

I think that it is clear that the Supreme Court under the commerce clause will require some limits to the commerce clause. This proposal offers or recognizes no limits to Federal control over State waters.

Mr. CARNEY. Okay. I guess I am trying to work through is your concern with the scope or the definition?

Mr. HOPPER. Well, I don't think you can separate them. I think it is too broad from a scope standpoint. The definition, I could talk to you for hours about the ambiguities in the current definition.

Mr. CARNEY. I really wish you wouldn't.

[Laughter.]

Mr. HOPPER. For example, it does not define tributaries, so that is still an open question. Again, as the Court has recognized in Rapanos, and we argued in that case, it is a moving target. There has never been a regulatory definition of tributaries. We don't have a statutory definition of tributaries. It is going to continue to be a bone of contention and subject to litigation.

Mr. CARNEY. Professor Percival?

Mr. PERCIVAL. I just would like to state that the consequences of adopting Justice Scalia's definition as Mr. Hopper has been advocating is that there would be a tremendous restriction of the Federal Government's ability to regulate under the Clean Water Act, not just to protect wetlands but also to stop point source dischargers and also to prevent oil pollution.

In fact, it would have it exactly backwards because the area where you wouldn't have Federal jurisdiction would be in those upstream areas of the watershed where the States themselves would have little incentive to adopt protections because it would primarily benefit States downstream.

I think that is precisely the reason that the overwhelming majority of States supported the Federal Government's position in both SWANCC and Rapanos and resisted efforts to try to narrow the regulatory jurisdiction of the Corps. This bill in no way would be an unprecedented intrusion on States' rights. In fact, it would restore the ability of the Federal Government to protect States that otherwise are relative helpless about the pollution that flows into their State from other States.

Mr. CARNEY. Thank you.

Ms. Connolly.

Ms. CONNOLLY. SWANCC actually specifically called on the States to respond, and I find it interesting that most did not respond. I think in part and as somebody who is active in the debates in South Carolina, the States honestly feel that the Federal Government has an important role here.

In fact, there were the vast majority, 33 States, signed onto a bill supporting the Government's interpretation in the Rapanos and Carabell decisions. I think that they recognize that having Congress set forth workable language that will achieve the Congressional purpose, as the Chairman pointed out so well, the chemical, physical and biological integrity of the Nation's waters is necessary and not the responsibility of the States.

Mr. CARNEY. All right, thank you.

Mr. Chairman, I thank you for the indulgence of your time.

Mr. OBERSTAR. I appreciate the gentleman's questions.

Professor Gilchrest.

Mr. GILCHREST. That is my brother, Mr. Chairman.

I would like just a statement first to clarify the intent of this Congressman, make that very clear. Rivers and Harbors Act, Clean Water Act, legislative history going back 100 years, 30 years, 3 years, what my intention is along with a number of my colleagues is to get a grasp or an understanding of the change in the hydrologic cycle of water in the United States over the last 500 years. What was the hydrologic cycle 500 years ago, 400 years ago, 300 years ago, all the way up the present day? It has drastically been changed and, to a large extent, been degraded.

I would also say, and I don't say this in a flippant manner, but I remember the definition of tributary in my seventh grade geography class. We could probably take Mr. Bussey's definition from my seventh grade and apply that somewhere for the tributary.

What do we do now with our intent as Members of Congress? Do we apply navigable waters just to the Federal Government just for downstream purposes and allow the States to deal with upstream regulations or do we have a better sense?

We do have to deal with the legality of this. We have to deal with statutes. We have to deal with regulations. We have to deal with judicial interpretations of those things. But underneath all of this is an ephemeral stream that provides a magnificent ecological niche in vast areas of this Country or there are tributaries or there are intermittent streams or there are non-tidal wetlands or there are coastal areas that depend on streams and tributaries and rivers coming from the interior of the U.S. which provide coastal area habitat for spawning fish of which 75 percent we use on our dinner plates.

The understanding that there is nature's design, especially nature's design that is dependent upon the hydrologic cycle, upon which we are dependent. So the intent of Congress is to understand how human activity can and must now with a bulging population be compatible with nature's design.

For all those legal wrangling, the intent of this Committee to have some understanding about when you drive a tractor across a field too many times, you are going to leave a rut, but that is already taken care of because normal farming practices are exempt from these regulations.

I guess my question is if we take out in the present legislation the term, navigable waters, and we use the language of this legislation, what else needs, in your judgment, to be done with the language of the legislation to clarify the intent of Congress? Not to become over-bureaucratic to a mining operation where they leave a couple of ditches and they fill up with water and they are waters of the United States, so you can't do anything else with them, or a farmer that might want to change from corn to a nursery operation to growing lodgepole pines or something like that.

What else do you think in the present legislation needs to be changed, if any, to clarify the intent of Congress to restore the chemical, physical and biological integrity of the Nation's waters and what do you think might need to be changed in the regulatory structure that should be made into statute?

Mr. PERCIVAL. A couple of things that come to mind: First, I think the most important thing you can do is make it clear as this hearing is doing by contributing to the legislative history that your intent is not to expand in any way Federal authority but simply to restore it to the state it was in prior to the SWANCC and Rapanos decisions.

The fact that Chairman Oberstar's bill has a savings clause that specifically references the existing exemptions in the Act certainly will make it clear that normal farming activities are not subject to the Section 404 program even though we keep hearing about these anecdotes that supposedly this would cause some problem there.

I think Justice Breyer said it right in his dissent, his separate dissent in the Rapanos case where he said that the waters of the U.S. are so various and so intricately interconnected that the only way to achieve the Congressional goal of restoring their chemical, physical and biological integrity is to do what essentially Chairman Oberstar's bill would do, to extend Federal authority to the limits of Congress' constitutional power while entrusting to the Corps and EPA the responsibility of exercising that power intelligently, subject to Congressional oversight.

Mr. HOPPER. I don't think that protecting the Nation's waters requires federalizing the Nation's waters.

Mr. GILCHREST. Can I just interrupt the gentleman just for one second?

I live in the Chesapeake Bay Region of Maryland, and the biggest contributor of freshwater and also the biggest contributor of nitrogen to the Chesapeake Bay comes from the Susquehanna River which is Pennsylvania. Of course, that is a navigable water but what goes into the Susquehanna River from as far away as Cooperstown, New York and Harrisburg, Pennsylvania. There are numerous ephemeral and small tributaries.

Mr. HOPPER. I think that the Federal structure requires that any legislation accommodate States' rights and individual rights. The Supreme Court said, I think, best when they said that notwithstanding our desire to improve the human condition, we cannot do so by means shorter than the constitutional way.

One of the virtues of the plurality approach in the Rapanos, even though I can see as Professor Percival rightly pointed out that it would greatly reduce the reach of Federal control, is that that approach at least has the virtue of being clearly demarking, fairly clearly demarking where Federal control ends and State control begins.

One of the reasons why a lot of the States have not been able to step up subsequent to SWANCC was because it was not clear where the Federal Government was going to draw the line after SWANCC. After SWANCC, it should have been clear that the Corps had no authority to regulate isolated water bodies, but it is still doing so and has narrowly interpreted SWANCC.

So, in response to your question, I think what is needed is a clear demarcation of Federal authority versus State authority. I don't think the answer is to cut the States out of it in the sense of federalizing it as this proposal seems to do, and I do think that the Supreme Court has at least indicated that Federal control could go as far as the plurality has said.

Mr. GILCHREST. Thank you very much.

Ms. CONNOLLY. In answer to your question, I would change nothing. I think that the definition and the bill are sufficient, and I think that what we need to bear in mind is that our constitution and our Nation have designed the system that the Executive Branch are the experts.

I am not a scientist, but the science shows—and I have got this in my submitted text—that broader regulation is essential. And so, I think that this is an example, that the language before this Committee will satisfy those requirements.

Mr. GILCHREST. Thank you very much.

My closing comment, Mr. Chairman, is Oliver Wendell Holmes said the Constitution was made for people with fundamentally differing views, so we are seeing that play out here. Thank you.

Mr. OBERSTAR. Thank you very much, Mr. Gilchrest.

Mr. Arcuri.

Mr. ARCURI. Thank you, Mr. Chairman.

I would just like to thank the panel. I learned a great deal, listening to the three of you. Thank you very much for sharing your thoughts.

I just would like to point out that I certainly share the Ranking Member's concerns with respect to creating a bill that would in places like in my district where we have extensive farmland, where if it rains very hard you are going to get temporary wet spots, certainly creating a situation where then there can be regulation or that the farmer would have to submit a permit before using fertilizer or farming his land is a concern.

However, to the point that Mr. Gilchrest made in referencing Cooperstown which is in my district. I happen just last week to have been by the very small stream that actually is the beginning of the Susquehanna Basin in Cooperstown, and it clearly is not a navigable stream.

My concern is this: If we narrow the definition to the point where we are only applying to navigable streams, clearly we are missing the boat because again the Susquehanna Basin starts in a small little stream in Cooperstown. If that is being polluted somewhere along the way in many, many very small former mill towns, we are not going to be able to regulate it if the State of New York chooses not to regulate it.

So my concern is how do we do that federally? How do we deal with it if a State chooses not to regulate it in its own State?

Mr. HOPPER. Well, I don't see the State not regulating any water body. I think I can say with confidence that it is illegal in every State to discharge pollutants to water bodies. Nobody on the Supreme Court, absolutely nobody on the Supreme Court has suggested that Federal regulation is limited to actual navigable waters. It is beyond that.

So your concern, I think, is something you can put behind you. There is no precedent now for limiting Federal jurisdiction to actual navigable waters. We are beyond that.

I think that there has been an awakening, environmental awakening among the people and among State legislators. I just think that in keeping with the constitutional structure and what Congress expressed as a policy to defer to the State's primary responsibility to protect against pollution, then I think States will step up and assume that proper role once it is clear where Federal jurisdiction ends.

Ms. CONNOLLY. With respect to your question, Congressman, about the exemptions, one thing that is very clear, the savings clause makes sure to clarify something in a way that I actually don't think is necessary. I think it is extra. I think that the exemptions that are currently in place 404(f) would remain in place and that farmers putting down fertilizers are exempt from 404 regulation and would remain exempt from 404 regulation.

Mr. ARCURI. That is the fear that we get. That is the number one question that we get from people with respect to this, to the change.

Ms. CONNOLLY. I understand that is why the savings clause was included even though it, under most analyses, would not be necessary.

Mr. PERCIVAL. I concur with Professor Connolly's remarks.

Mr. ARCURI. Thank you very much.

Mr. OBERSTAR. I think this panel's testimony may be the most important of our inquiry while not denigrating any other testimony. The issue of constitutionality, the issue of intent of Congress is critical to moving forward with the pending bill. I think these very thoughtful, scholarly presentations from one end of the spectrum to another are extremely important.

I would like to ask Professor Percival. How can the same justice be on two sides of the issue?

Your research on Justice Rehnquist's opinion in 1979: "Reference to the navigability of a waterway adds little, if anything, to the breadth of Congress' regulatory power over interstate commerce. It has long been settled that Congress has extensive authority over this Nation's waters under the commerce clause. It cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation."

Then he goes further to hold that the regulatory program established by the Clean Water Act was so comprehensive it preempted the federal common law of interstate nuisance.

Then how could he side with Justice Scalia? What intellectual leap of faith did he make?

Mr. PERCIVAL. Well, I actually think that that is not really an inconsistency.

Justice Rehnquist had his own particular vision of federalism which he adhered to consistently regardless of whether it supported a conservative or liberal cause. He had already, at the time he made those statements about Congress having such broad constitutional power to protect the waters of the United States, said in his dissent in Fry v. United States that there can be no more important issue before the Court than how to resuscitate States' rights.

In 1981, what he was doing when he said the federal common law of nuisance that the Supreme Court had used throughout the early 20th Century to try to resolve interstate pollution disputes between States, when he said that was preempted, he was doing so for two reasons: first, because he did indeed believe that the Clean Water Act was so comprehensive because it required a permit for any discharge to the waters of the United States, that that would take care of the problem and, secondly, he thought that the judiciary was uniquely ill suited to serve as a kind of national EPA umpiring these disputes. It is best left to the administrative agencies.

I think that explains why in 1985 he joined the unanimous decision by Justice White in the Riverside Bayview case, that that was the proper view of the law.

Now it is true that in the SWANCC decision, he was in the majority in that case, but I suspect that was because he viewed the facts of that case very differently. I don't know how he would have come out in Rapanos.

But, again, you have to bear in mind that both SWANCC and Rapanos are not constitutional decisions. The Court didn't question the constitutional authority of Congress under the Clean Water Act. Instead, what they said is even though this might have bad consequences for the environment, it is not our fault. We think Congress adopted a narrower interpretation, and it is up to Congress to tell them they are wrong if that is the case.

Mr. OBERSTAR. Thank you.

Mr. Hall has arrived, and we are glad to welcome him back to the Committee. The gentleman is recognized.

Mr. HALL. Thank you, Mr. Chairman. I appreciate your tolerance with my scheduling and thank you, panel, who I am sure I will read up on all of your testimony that preceded my arrival.

There are two questions I have. One is under the current guidance which proposes to use both the Scalia test and then failing that the Kennedy significant nexus test, evaluations of waters could add significant time, maybe two to three months, to water protection projects. Assuming that type of burden, doesn't the regulatory confusion created by the Supreme Court threaten to short-circuit the already overwhelmed system?

Nodding is noted.

Ms. CONNOLLY. I agree completely, and that is something that I have got in my written testimony and I mentioned briefly as well.

I think that the Corps of Engineers, and I work with Corps people on a regular basis, do their best to keep up with things, but there is a huge workload. They process 90,000 permit applications and over 100,000 jurisdictional determinations every year.

The so-called guidance that leaves a lot of unanswered questions is going to add a huge burden to them or, in the alternative, it is going to cause a decision just not to regulate things that should be regulated because it is too difficult or there is too much pushback. That is my real concern is that there may be a great falloff in regulation as a result of this guidance.

Mr. HOPPER. I think it will result in just the opposite.

Mr. HALL. Okay.

Professor, do you want to weigh in?

Mr. PERCIVAL. I would tend to agree with Professor Connolly.

I would also emphasize that if you look at the history of the 1972 legislation, one of the things Congress was doing was rejecting the notion of relying primarily on site-specific assessments of environmental impact on ambient water quality. That is why we went to this comprehensive system of national technology-based effluent standards because we realized that we just couldn't accomplish it if you had to, for every discharger, make such an assessment. Here, it is for jurisdictional purposes as well.

Mr. HALL. The second question is because I have a strong farming presence in my community and concerns have been expressed about reaction to the Supreme Court ruling on the future of clean water regulation, I would appreciate any comments on the way the impacts of the current regulatory situation would affect farming practices.

Also, to what extent, if any, would removal of the word, navigable, from the underlying statute have on fields with grass waterways for temporary wet spots?

Mr. PERCIVAL. I would again reiterate that the legislation expressly in its savings clause reiterates the existing exemption for normal farming activities from the Section 404 program.

I think the one thing the legislation might do that would affect farmers is that by ensuring that the confusion created by the Supreme Court decisions will not lead to a great cutback in the scope of Federal jurisdiction, it will do a better job of protecting watersheds and thus improve the quality of waters that many of those farmers may use for irrigation.

Mr. HOPPER. One of the problems with the farm exemptions is that even though the language is broad the interpretation is quite narrow. For example, what is exempt is ordinary farming practices, but the way the Corps applies that, that doesn't mean ordinary farming practices throughout the Country or even throughout a region but on this particular farm. So if you are switching from row crops to vineyards, as was the case in the Borden Ranch case, you will run afoul of Federal regulation because this narrow interpretation would not apply the farm exemption to that type of activity.

Deep plowing was at issue there where a shank is brought into the ground to tear it up so you get better drainage for the vineyard as opposed to the row crops, and the Corps of Engineers determined that that was an ordinary practice on this particular ranch. It couldn't be used and was subject to Federal control.

As to whether the proposed bill would regulate you said small areas that become wet, if they fall outside of the farm exemption, they would be regulated. Small ponds or swales, those types of areas may well be regulated. I think that what is clear here is that all waters are going to be regulated unless they fall within this narrow interpretation of the farm exemption.

Mr. HALL. Thank you.

I have one last question for both Professor Connolly and for you, Mr. Hopper, and that is some States including New York have an ongoing discussion about the ramifications of the waterway being navigable in terms of public access on private land. In other words, if one can canoe in or kayak in on a two inch deep stream or so on, that then could be construed as allowing public access.

Is there a crossover between what under these rulings are for the purpose of water quality protection what is determined navigable and what is determined navigable in terms of access?

Ms. CONNOLLY. What you are referring to, I believe, are the issues related to public trust and when you get into the concepts of navigability and protection of access to water. Historically, that is coming from ancient Roman times, and that is a separate question. The definitions that would be put in place by this proposed legislation, I do not think, would come into play there.

I also would like to go back just briefly to your previous question about the farming exemptions and just wanted to add one little thought which is even in the event that certain activities such as changing from one type of farming operation to an entirely different type of farming operation that would involve great disturbance, many, many of those activities would fall under a streamlined permitting process.

Even though the Corps does undertake 90,000 permit applications, 90,000 permit actions a year, only about 5,000 of those are the full individual permitting process where there is a public interest review and public notice and comment. For the most part, most of those activities proceed through a streamlined process, and most farming activities, even if they were captured, would likely proceed through a streamlined permitting process.

Mr. HOPPER. Streamlined permitting is a misnomer. The cost is very high even for a nationwide permit, and the length of time to get a nationwide permit is very long.

Beyond that, what the statistics about permit grants don't tell you is the impact on the permittee. I just got a call yesterday from a fellow in Florida who wants to fill 11 acres on his property. He can get a permit if he provides 273 acres in mitigation. That is what the statistics don't tell you.

Now with respect to this access, I agree with the professor. I am not so sure. I don't see an immediate impact on crossover. I don't see this as really affecting the access question immediately. I would just say, however, that there is an issue of incrementalism that goes on where we see the silent encroachment of Federal power in one area does bleed over into other areas.

Mr. HALL. The finishing creeps.

Mr. HOPPER. So I would not say as a matter of law that this would have no impact on access rights.

Mr. HALL. Professor Percival?

Mr. PERCIVAL. I would just say I don't see any conceivable way in which this bill could change rights of access.

The second point I would make is that there was one case before the Supreme Court where a private landowner actually dug a channel to his lake in order to connect it to the ocean. That is the Kaiser Aetna case. What the Supreme Court ruled in that case is even though the landowner had made it navigable, the navigation servitude did not mean that that became anything that the public had a right of access to unless the Government actually took the property and paid compensation to the landowner. So I don't see any conceivable way that could be a problem.

Mr. HALL. Thank you.

Thank you, Mr. Chairman.

Mr. OBERSTAR. Well, I thank you very much for your contribution, Mr. Hall, and for the questions and for the responses.

Coming back to my reading earlier into the record the Committee report language which clearly expresses the intent of Congress in addition to and supplementing the actual words, that the Committee was reluctant to define.

"One term that the Committee was reluctant to define was the term, navigable waters. The reluctance was based on the fear that any interpretation would be read narrowly. However, this is not the Committee's intent. The Committee fully intends that the term, navigable waters, be given the broadest possible constitutional interpretation, unencumbered by agency determinations which have been made or may be made for administrative purposes."

Is there any way, Mr. Hopper, that we could refine the language in the bill I have introduced, pending before the Committee, that would resolve fears that Congress is overreaching in light of the legislative history and intent of Congress?

Mr. HOPPER. Yes, well, you could shelve it. I think that is the only way it would resolve my concerns about overreaching.

Mr. OBERSTAR. But that would then close off opportunities for attorneys like you to litigate?

Mr. HOPPER. We have got plenty of work to do.

I think that what you just read was also cited by Mr. Baker, and he went on further in that citation to indicate.

Mr. OBERSTAR. No. He was referring to the law. I am referring to the Committee report.

Mr. HOPPER. It sounded like the same language to me. In any event, it was similar language that was cited by the Corps of Engineers in the SWANCC case, and the Court looked at that and said, we still don't feel that that was an adequate expression of Congressional intent to go beyond traditional powers over navigation.

But as I said at the beginning, Mr. Chairman, I think what is important here, at least one thing that your bill does is that it clearly states that in the bill that Congress intends to exercise its full extent of its authority.

We, as a regulated public, public officials don't have access to these Committee reports, and we have to live with the law as it is written. And so, it is the language in the Act that is important. It is not some subjective interpretation of any one of us or even any eloquent statement of purpose in these reports. They really don't count. The courts don't even get to them unless there is some ambiguity in the language of the Act itself.

Mr. OBERSTAR. Well, that is true, that the courts have traditionally not reviewed, except where there is great uncertainty, the Committee reports. Yet, Committee reports very consistently interpret the language in layman's terms rather than in legislative terms.

The courts try to avoid that, but they gratuitously come in and say, well, we know what Congress intended. It certainly had to mean thus and so.

We deal with that constantly while we continue to refine our legislation.

I think in the purpose of protecting the Nation's waters, we intend to move forward with clarity, and clarity means taking the term, navigable, out if that confuses the Court.

I appreciate the contributions of all three of you in helping us in these deliberations.

Mr. HOPPER. Thank you.

Mr. OBERSTAR. The Committee is adjourned.

[Whereupon, at 6:00 p.m., the Committee was adjourned.]

Committee on Transportation and Infrastructure

Hearing on "Status of the Nation's Waters, including Wetlands, Under Jurisdiction of the Federal Waters Pollution Control Act"

Tuesday, July 17, 2007

Statement – Congressman Jason Altmire (PA-04)

Thank you, Chairman Oberstar, for holding the first of two hearings to examine the status of the nation's waters under jurisdiction of the Federal Water Pollution Control Act, commonly known as the Clean Water Act. I look forward to the opportunity to hear from state officials, legal scholars, scientists, and stakeholders about this critical issue.

In 1972, Congress passed the Clean Water Act to amend the Federal Water Pollution Control Act to improve the water quality of our lakes, rivers, streams, and other waterways. It established national permitting requirements and standards for those seeking to discharge pollutants into the nation's waters. And over the last thirty-five years we've seen remarkable improvements in water quality as a result of its enactment.

In 2001, the Supreme Court issued an opinion in the case of *Solid Waste Agency of Northern Cook County v. Corps of Engineers (SWANCC)* and, then in 2006, ruled on *Rapanos v. United States (Rapanos)* about the scope of the Clean Water Act. Both decisions – 5-4 in *SWANCC* and 4-4-1 in *Rapanos* – demonstrated divisions on the court. There is sincere concern about how both of these interpretations will affect the level of pollution within the nation's waterways and the permitting process for discharges.

At today's hearing and at the one on Thursday, I look forward to learning more about the implications of the SWANCC and Rapanos decisions. I thank the Chairman again for his attention to this issue and yield back the balance of my time.

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STATEMENT

Of the Honorable Richard Baker
Committee on Transportation and Infrastructure

Hearing on the
"Status of the Nation's Waters, including Wetlands, under the Jurisdiction of the Federal Water Pollution Control Act"

July 17, 2007

- I have been concerned for a long time about how the Corps of Engineers and EPA regulate wetlands.

- I have heard not only from my own constituents about this issue, but other Members have talked to me about problems their constituents are having with the Corps and EPA.

- Federal wetlands regulation is confusing, costly, and frustrating. The Federal definition of what is a jurisdictional wetland is unclear. Many wetlands jurisdictional decisions are inconsistent and arbitrary. And many of the court decisions that have been issued over the years are not in agreement.

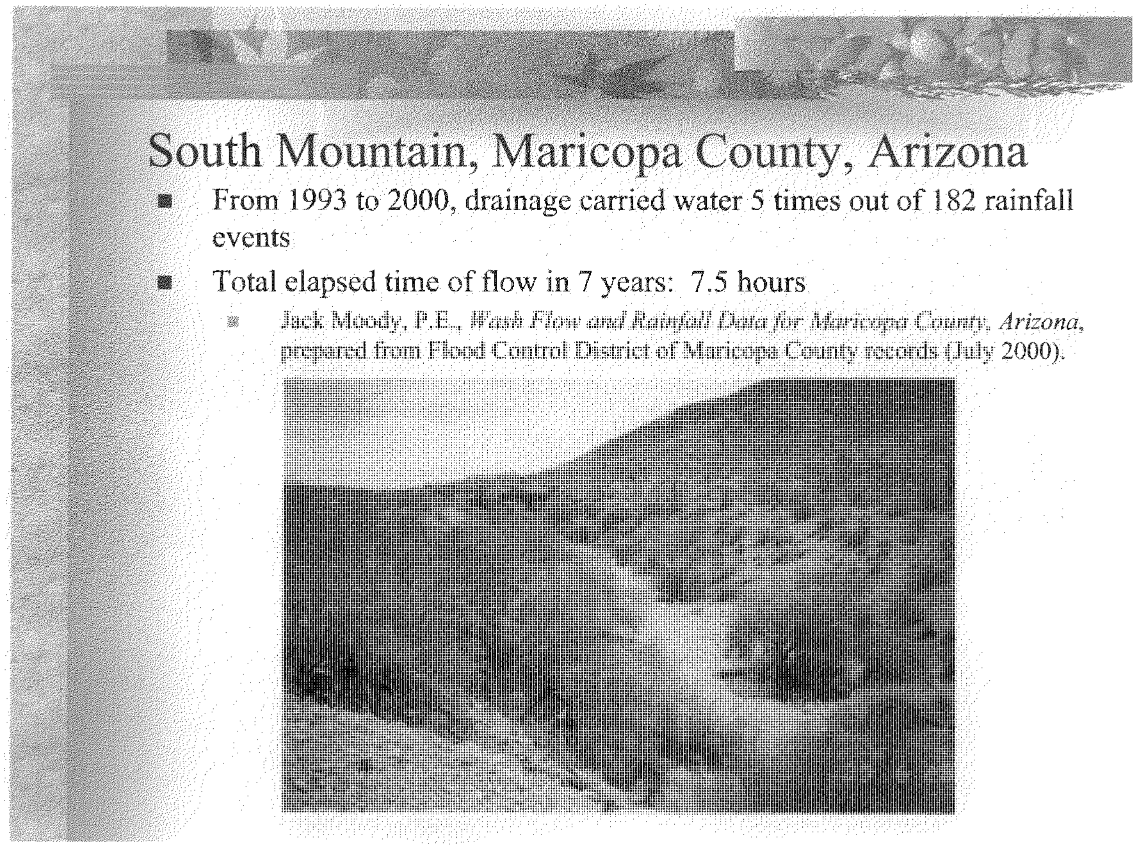
- The Supreme Court's Rapanos opinion last year also has added to the confusion. The Court's opinion left the Corps, EPA, and the regulated public with unclear guidance on how to interpret the Clean Water Act's jurisdictional scope.

- Now, new legislation sponsored by Chairman Oberstar has been introduced to revise the Clean Water Act's wetlands program. I applaud him for attempting to clarify the scope of jurisdiction under the program, but I am very concerned that this bill represents the largest ever expansion of Federal powers over private property and creates a larger cloud of confusion over application and interpretation. Clarity of existing authority, not an expansion of it, is what is necessary.

- This bill would expand Federal Clean Water Act jurisdiction. The Clean Water Act has never regulated "all intrastate waters," and "all activities that affect those waters" to the fullest extent of Congress' legislative power under the Constitution, as this bill would allow. These changes will invite more litigation as the government, activist groups, and the regulated public seek to clarify the uncertain scope of jurisdiction under the bill.

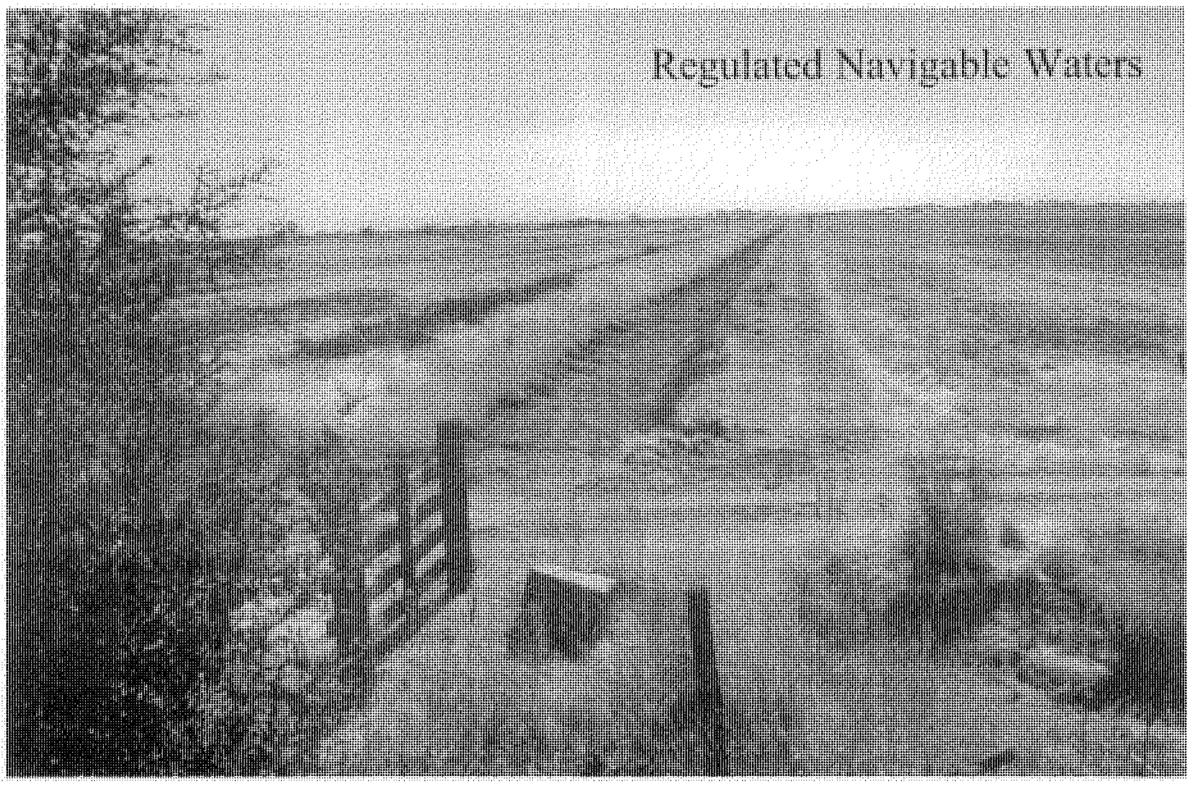
- I urge the Committee to study the issue of wetlands regulation closely and this legislation's potential impact on that authority.

- I look forward to working with Chairman Oberstar and Ranking Member Mica on this endeavor.



South Mountain, Maricopa County, Arizona

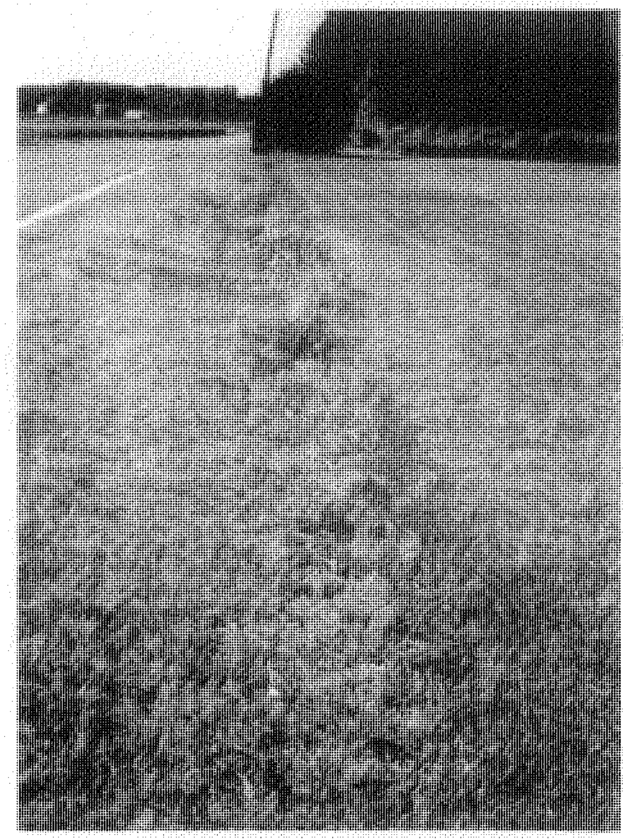
- From 1993 to 2000, drainage carried water 5 times out of 182 rainfall events
- Total elapsed time of flow in 7 years: 7.5 hours
  - Jack Moody, P.E., *Wash Flow and Rainfall Data for Maricopa County, Arizona*, prepared from Flood Control District of Maricopa County records (July 2000).



Elk Grove Calif.

Roadside Ditch in
***Deaton* Case**

Wicomico County, Maryland



STATEMENT OF
THE HONORABLE JERRY F. COSTELLO
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
HEARING ON THE STATUS OF THE NATION'S WATERS, INCLIDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT
TUESDAY, JULY 17, 2007

Thank you, Mr. Chairman for holding this hearing on the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act.

Our nation has nearly 23,000 miles of ocean shoreline, more than 5,500 miles of Great Lakes shoreline, and 3.6 million miles of rivers and streams. As a life-long resident of a Great Lakes state, I am well aware of the importance of these vital natural resources to the economic health and well being of our state and its residents. I also know how important the Clean Water Act has been to preserving these waters, resulting in significant investment in wastewater infrastructure and emphasizing truly clean water. It is widely viewed as the Nation's most successful environmental law.

Recently, much of our current interpretations of jurisdictional approach and administrative enforcement by the EPA and the Corps of

Engineers to regulate our waters have been called into question as a result of two Supreme Court decisions, one in 2001 and one in 2006.

Congress has been reviewing this issue in hopes to provide clarification to our agencies, states, and stakeholders. However, that too, has caused turmoil for the various stakeholders.

I have heard from many in my congressional district, specifically the farming and mining communities, with grave concerns about any type of expansion of regulatory authority. There is concern, and maybe some misconception, that we are seeking to regulate puddles and things of that nature.

I have also been told that under legislation introduced by Chairman Oberstar no significant changes are being made. Rather, he is simply trying to clarify the intent of Congress and remove the uncertainty surrounding the limits of Federal authority.

I am committed to the protection and restoration of our nation's wetlands and waterways and want to work with this Committee and interested stakeholders to accomplish that goal. I am interested in hearing from our state officials the implications the current court decisions have had on their water systems. I am also interested in hearing from our legal scholars regarding their interpretations of our current situation.

With that, I welcome the witnesses here today, and look forward to their testimony.

Vernon Ehlers

Opening Statement
Transportation & Infrastructure Committee hearing on
The Status of the Nation's Waters and the Clean Water Act

Tuesday, July 17, 2007
2:00 p.m.

- Congress must act now to clarify the scope of the Clean Water Act.
    - We have the legislative responsibility to address the confusion and the uncertainty that have arisen out of the *SWANC* case in 2001 and the *Rapanos* and *Carabel* cases in 2006 in the Supreme Court.
    - We need to provide clarity and certainty to the regulatory agencies, which have been bogged down with lawsuits and a lack of guidance on how to proceed in many situations.
    - We need to provide clarity, certainty and consistency to the regulated community, because that will mean less litigation and lower costs for their projects.
- Environmental protection of wetlands, intermittent or ephemeral streams, and other "non-navigable" waters is critical for broader environmental protection and restoration efforts.

  - For example, we are in the midst of a major initiative to clean up and protect the Great Lakes, based on a comprehensive strategic action plan released in 2005.
  - Wetlands are a critical component of that effort because they improve water quality through nutrient cycling and sediment trapping and retention, and because they provide habitat and protection for numerous fish and bird species.
  - The Great Lakes Regional Collaboration Strategy also highlighted the importance of intermittent streams. Pollution makes its way downstream through streams and rivers and eventually out onto our beaches and harbors and into open water. Like wetlands, headwaters also filter pollutants, and they recharge groundwater and supplement drinking water sources.
  - There is a strong national interest in preventing pollution of these bodies of water and making sure that the lakes are drinkable, swimmable, and fishable all the time, everywhere.
- I am concerned that in the current state of affairs, the EPA and the Corps are going to be bogged down by jurisdictional determinations

over waters and activities that have historically been clearly governed by Clean Water Act requirements. If the status quo remains unchanged, I envision more lawsuits, more challenges, more confusion, and more permitting backlogs. That is not in the interest of the agricultural community, the property development or construction industries, or other regulated communities. And it is certainly not in the interest of the environment.

- I look forward to hearing from our witnesses today and on Thursday to learn more about this important issue and hopefully to find common ground on how to move forward.

STATEMENT

Of the Honorable John Mica Committee on Transportation and Infrastructure

Hearing on the "Status of the Nation's Waters, including Wetlands, under the Jurisdiction of the Federal Water Pollution Control Act"

July 17, 2007

- Wetlands are transition areas between aquatic ecosystems and upland areas.

- Wetlands can provide environmental and economic benefits by helping to reduce flooding, purify our drinking water, and keep our streams, lakes, and other waters naturally clean. Wetlands also serve as habitats to a variety of economically and environmentally important plant and animal species.

- While there are excellent state and Federal programs that help maintain and create wetlands, other government regulations bind individual property owners in costly and confusing red tape.

- Under the Clean Water Act, there is a haphazard collection of wetlands regulations, guidance, and court decisions-- all of which emanate from Section 404 of the Act.

- The Section 404 "wetlands" permitting program remains one of the most difficult Federal permitting programs to navigate through. Under this program, a permit is required from the Corps of Engineers for almost any disturbance of a wet area on public or private property.

- This program covers not only wetland disturbances by private citizens, but also those by Federal agencies, states, and local governments. While the Corps issues a 404 permit, the EPA can "veto" the Corps decision to issue the permit.

- One of the difficulties of this program is the broad Federal definition of a jurisdictional wetland, which can cover even areas that are not wet on the surface and may be very difficult for an average homeowner to identify.

- Another difficulty of this program is that all wetlands, regardless of their functions and values, are regulated in the same strict fashion. Not every wet area or puddle is as environmentally important as another, and the program should take this into account.

- Still another long-standing difficulty is the program's lack of clarity and certainty. The Federal definition of what is a jurisdictional wetland is simply unclear. Frequently, it is nearly impossible for a property owner to determine whether or not a particular area is even subject to Federal jurisdiction.

- This problem was compounded by the Supreme Court's highly split decision last year in the Rapanos case, which left the Corps and EPA with unclear guidance from the Court on how to interpret the Clean Water Act's jurisdictional scope in the future.

- These sorts of difficulties have resulted in much of the controversy and litigation that we have seen in this program over the years.

- The time has come to address these difficulties by developing a wetlands permitting program that is more realistic, more efficient, and more compatible with the competing interests of environmental protection, infrastructure and economic development, and property rights.

- It remains to be seen whether the Administration's new wetlands guidance will address any of these concerns.

- Some in Congress, including Chairman Oberstar, already have introduced proposals to revise the Clean Water Act's wetlands program.

- It is doubtful, however, that these proposals will clarify Clean Water Act jurisdiction or create any certainty for the regulated public.

- Rather, I am concerned that these proposals will vastly expand Federal powers over private property, upset the long-standing cooperative relationship that the Federal government and the states have had with regard to water management and water quality, and create even more confusion and uncertainty over application and interpretation of the Act.

- The legislation proposes a much broader definition of "waters of the United States." It will eliminate the traditional basis for Federal jurisdiction under the Clean Water Act by deleting the term "navigable" from the statute, and expand the scope of Federal jurisdiction to its maximum limits under the Constitution.

- These changes would effectively erase many decades of jurisprudence and invite the Federal courts to decide the constitutional limits of Federal authority under the Clean Water Act.

- This, in turn, will spur more litigation as the government and stakeholders struggle to clarify the uncertain scope of jurisdiction under the proposals.

- Congress has the responsibility to state clearly the jurisdictional limits of Federal regulatory programs, and not create more confusion and controversy, as would happen here.

- Our witnesses today and on Thursday will address their experiences with Clean Water Act regulation. I anticipate we will hear about some of their problems and concerns with the way the program is currently working.

- I hope Members will listen to the testimony this week so that later we can all work together to create a regulatory program that is clear, predictable, reasonable, and protective of our water resources.

Harry E. Mitchell

Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Water Resources and Environment
7/17/07

--Thank you Madam Chairwoman.

--To say water is important to Arizona is an understatement. With such a limited supply, our state's livelihood literally depends on our ability to reliably control it, as well as keep it clean.

--In that regard, the Clean Water Act has been an invaluable tool.

--Nationwide, it has helped us make impressive and critical progress towards improving the quality of our nation's water.

--Recent Supreme Court decisions, however, have caused confusion as to the scope of the Clean Water Act.

--In deciding how to resolve this confusion, I want to encourage this committee to take into account the unique needs of arid regions like Arizona.

--I look forward to hearing from today's witnesses.

--I yield back the balance of my time.

UNIVERSITY OF
SOUTH CAROLINA

SCHOOL OF LAW

STATEMENT OF KIM DIANA CONNOLLY

ASSOCIATE PROFESSOR
UNIVERSITY OF SOUTH CAROLINA SCHOOL OF LAW

TO THE

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

HEARING ON
"STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT"

17 JULY 2007

Mr. Chairman, distinguished members of the Committee, good afternoon. It is indeed an honor and privilege to testify about a matter of compelling national significance: the regulation of wetlands and other waters of the United States. My name is Kim Diana Connolly and I serve as faculty at the University of South Carolina School of Law. My ultimate message today will boil down to one important truth: Congress must take immediate action and enact legislative language to straighten out the mess that regulating wetlands and other waters of the United States has become in recent years.

I have come to this conclusion after years of work in and study of what is known as the Clean Water Act. Since I was a child growing up on Cape Cod, I have been intrigued by wetlands and other waters of the United States. I attended the University of North Carolina at Chapel Hill to earn my undergraduate degree, and Georgetown University Law Center to earn my juris doctor degree. Between college and law school I worked as a VISTA volunteer and directed a small non-profit that focused on water access and wastewater disposal in low-income rural North Carolina. Following law school I practiced here in Washington D.C. at a number of law firms, representing among other clients many different members of the permitted community in matters dealing with regulation under the Clean Water Act and other environmental laws. Once invited to join the faculty at the University of South Carolina School of Law, I began to devote much scholarly energy to analyzing the regulation of waters of the United States. I have thus written articles and chapters and co-edited a book on this subject, and spoken numerous times over the years at academic conferences and other venues. If you are interested in more details about my background you can find my full curriculum vitae at http://www.law.sc.edu/faculty/connolly/cv.pdf.

I have been asked by your committee staff to provide information about recent developments addressing the regulation of waters of the United States as the Committee considers this important issue. To understand the current state of play, however, I believe it important to first provide a bit of historical context.

As a nation, for more than a century we have recognized the value of waters to our economy and our way of life. As is true of many types of waters of the United States, wetlands can be found in every state in the nation. Wetlands and other waters differ depending on location due to a variety of factors including soil differences, topography, climate, hydrology, water chemistry, vegetation, and human impact. All wetlands provide various "functions and values" important to our nation, including some combination of water quality improvement, flood control, habitat for endangered and other species, recreational and educational activities and aesthetic values. *See generally* NAT'L ACAD. OF SCIENCES, NAT'L RESEARCH COUNCIL, WETLANDS: CHARACTERISTICS AND BOUNDARIES (1995), *available at* http://www.nap.edu/books/0309051347/html/index.html; U.S. Army Corps of Engineers, *Technical and Biological Information, available at* http://www.usace.army.mil/inet/functions/cw/cecwo/reg/techbio.htm; U.S. Envtl. Prot. Agency, *Functions and Values, available at* http://www.epa.gov/owow/wetlands/functions.html 07. Adjacent wetlands, tributaries of virtually all types and headwaters are inseparably bound up with other waters, and through their connectivity are essential to the maintenance of the quality of our nation's waters.

Congress provided authority to what has become the United States Army Corps of Engineers (Corps) to regulate certain activities related to the nation's waters back in the 1800's through various Rivers and Harbors Acts. Then, in the light of increasing pollution and escalating awareness of the importance of a healthy environment, Congress enacted the Federal Water Pollution Control Act Amendments of 1972, which gave the primary responsibility for federal protection of the nation's waters to the newly-created United States Environmental Protection Agency (EPA), although the Corps retained permitting authority under Section 404 of the Act. The 1972 amendments were amended again in 1977 and given the additional name of the "Clean Water Act."

My research shows that, in 1972 and again in 1977, Members of Congress did their best to set forth a clear path for regulating agencies and the regulated public with respect to their intent on what the Act should cover. As I argued on behalf of a bi-partisan group of current and former Members of Congress in an Supreme Court amicus brief I was privileged to co-author last year, "[i]t is clear that the intent of Congress when passing the Clean Water Act was to embrace the broadest possible definition of 'navigable waters' when it defined that term as 'all waters of the United States.' In particular, Congress intended that term to embrace both tributaries as well as wetlands that are adjacent to traditionally navigable waters and wetlands adjacent to any tributaries connected to those waterways." The Congressional amicus brief also points out that "[b]ecause wetlands adjacent to traditionally navigable waters, or adjacent to tributaries to those waters, have significant impacts on traditionally navigable waters, Congress intended for them to be subject to regulation under the Clean Water Act". A copy of that brief is included as an attachment to this testimony.

Through the Clean Water Act, Congress sought to "restore and maintain the chemical, physical and biological integrity of our nation's waters." Section 404 of that new law was entitled "Permits for dredged or fill material." Under Section 404, "[t]he Secretary [of the Army] may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites." Without a Section 404 permit, someone discharging dredged or fill materials would, in most cases, be in violation of Clean Water Act Section 301, which directs that "[e]xcept as in compliance with this section and [various sections including Sections 402 and 404] of this Act, the discharge of any pollutant by any person shall be unlawful." The test as to where jurisdiction lies depends on the definition set forth in Section 502(7) of the Act, where the term "navigable waters" is defined as "the waters of the United States, including the territorial seas."

Despite the best efforts by many Members of Congress in the 1970's to be clear regarding their intent, debates ensued about the geographical scope of Section 404 and the definition provided in Section 502 virtually immediately after its passage in 1972. Following some lower court activity and further debate in Congress, in 1985 a unanimous United States Supreme Court made a very clear statement about the Act's intended scope through its unanimous decision in *Riverside Bayview Homes,* 474 U.S. 121 (1985). The Court held that Congress' actions and statements indicated intent, in passing the original Act and the 1977 amendments, to have the phrase "navigable waters" include wetlands, without regard to artificial geographic limitations. In fact, the Court went so far as to opine (unanimously) that "[i]n view of the breadth of federal regulatory authority contemplated by the Act itself and the inherent difficulties of defining precise bounds to regulable waters, the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act." *Id.* at 134.

That unanimous court decision had lead the Corps and EPA to reconsider the breadth of appropriate federal regulatory reach. Both agencies issued slightly revised regulations about geographic jurisdiction with preamble language that came to be known as the "Migratory Bird Rule." Final Rule for Regulatory Programs of the Corps of Engineers, 51 Fed. Reg. 41,217 (1986) (*codified at* 33 C.F.R. §§ 320-330); Clean Water Act Section 404 Program Definitions and Permit Exemptions; Section 404 State Program Regulations, 53 Fed. Reg. 20,765 (1988) (*codified at* 40 C.F.R. §§ 232-233). That "Rule" asserted jurisdiction over certain intra-state waters based on their actual or potential use as a habitat for migratory birds. The Corps and EPA interpretation was upheld by a number of Circuit Courts over the years, but ultimately was ruled overbroad in 2001 by a 5-4 Supreme Court decision in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC)*, 531 U.S. 159 (2001). The Court concluded in *SWANCC* that an abandoned sand and gravel pit without any surface connections to other waters (but that did provide habitat for many migratory birds) was beyond the regulatory authority granted by Congress through the Clean Water Act. Although the constitutionality of the underlying regulation was challenged by the permit applicant in that case, the Court did not reach that constitutional question in rendering a decision.

Following the *SWANCC* decision, there was major concern that it would eviscerate a very broad swath of regulation of the nation's waters. It did, many agree, leave so-called "isolated" waters unprotected by federal law. Scientists and policy experts undertook (and continue to undertake) studies to understand what impact the decision has had on isolated wetlands, and what impact isolated wetlands have on the nation's waters. For a compiled bibliography of such studies, see the Association of State Wetland Managers website entitled ***Wetlands Science: Isolated Wetlands*** at http://www.aswm.org/science/isolated.htm.

Interestingly, almost all subsequent legal interpretations of the *SWANCC* decision by various courts as it applied to adjacent waters and tributaries found it to be very narrow. *See, e.g.*, Save Our Sonoran, Inc. v. Flowers, 408 F.3d 1113 (9th Cir. 2005); Treacy v. Newdunn Assocs. LLP, 344 F.3d 407 (4th Cir. 2003); United States v. Deaton, 332 F.3d 698 (4th Cir. 2003), *cert. denied*, 541 U.S. 972 (2004); Cmty. Ass'n for Restoration of Env't v. Henry Bosma Dairy, 305 F.3d 943 (9th Cir. 2002); Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526 (9th Cir. 2001). Post-*SWANCC* decisions were not, however, in universal agreement. *See* In re Needham, 354 F.3d 340 (5th Cir. 2003); Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001). Further, the agencies gave mixed signals as to how they were going to proceed in dealing with the issue of jurisdiction (for example, the Corps and EPA issued an Advanced Notice of Proposed Rulemaking that was subsequently withdrawn, and the varied interpretations of how to deal with *SWANCC* by Corps Districts nationwide led to Congressional inquiry and an internal call for data that was never summarized and made public). The permitted community became (perhaps understandably) more annoyed. Stakeholders on both sides continued to battle about interpreting geographic jurisdiction in individual decisions and on a broader policy level. During these years, the first (and second) Clean Water Authority Restoration Acts were introduced in Congress. Some progress was made on these bills, but perhaps because of the then-leadership in Congress, those legislative efforts did not receive the attention they deserved.

Then the United States Supreme Court got involved again, leading to its most recent set of opinions in *Rapanos v. United States*. My students beg for a simple explanation of what that case means, but I have no clear answer to such queries, except the obvious one – five justices voted to remand the consolidated *Rapanos* and *Carabell* cases. Otherwise, the mess this case has made of the jurisdictional scope of the Clean Water Act generally, and the Section 404 regulatory program in particular, is just beginning to be understood.

In *Rapanos*, ___ U.S. ___, 126 S.Ct. 2208 (2006), the Court sought to review a set of consolidated cases from the Sixth Circuit: *United States* v. *Rapanos*, 376 F.3d 629 (6th Cir. 2004), and *Carabell* v. *United States Army Corps of Engineers*, 257 F. Supp. 2d 917 (2003). The history of these cases is very interesting – I have compiled a website beginning with the application of the Carabells to develop their property and the enforcement order brought against Mr. Rapanos when he went ahead with activities without a permit. The website provides summaries and links during the various appellate processes through the ultimate decision, and is designed both as a historical file and a teaching tool. See http://www.law.sc.edu/wetlands/rapanos-carabell/

Both of these cases involved wetlands that either the EPA or the Corps had concluded – and the lower courts directly reviewing these cases affirmed – were "[w]etlands adjacent to," 33 C.F.R. § 328.3(a)(7), "tributaries," *id.* § 328.3(a)(5), to "waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce," *id.* § 328.3(a)(1) in which the regulation of wetlands adjacent to tributaries was at issue following the *SWANCC* decision. The ultimate result of the Supreme Court review is a confusing state of affairs that frustrates all stakeholders who deal with waters of the United States (with the possible exception of lawyers and law professors).

In *Rapanos*, Justice Scalia's plurality opinion (joined by Chief Justice Roberts and Justices Alito and Thomas) would have limited the Clean Water Act's protection of "waters of the United States" to those bodies of water that are "relatively permanent, standing or continuously flowing." 126 S. Ct. at 2225. A lengthy and extreme construal of the CWA 404 permitting program accompanies this plurality interpretation, including labeling the U.S. Army Corps of Engineers an "enlightened despot," *id.* at 2214, and concluding that the permitting program is an "immense expansion of federal regulation of land use that has occurred under the Clean Water Act..." *Id.* at 2215. But that opinion only garnered four votes.

It was Justice Kennedy who provided crucial the fifth vote for remand. Justice Kennedy's opinion was far less broad in its interpretation, and in fact goes so far as to state that the plurality opinion is "inconsistent with the Act's text, structure and purpose." *Id.* at 2246. However, Justice Kennedy does throw an interpretative muddle into Clean Water Act jurisdiction by insisting that the proper approach would be finding a "significant nexus" test to be developed by the regulating agencies. *Id.* at 2252. In the meantime, he asks for "case-by-case" review by the Corps when it "seeks to regulate wetlands based on adjacency to nonnavigable tributaries." *Id.* at 2249.

By contrast, Justice Stevens and Justices Souter, Ginsburg, and Breyer in dissent would have upheld the lower court jurisdictional findings and deferred to the agency interpretations as reflecting Congressional intent. *Id.* at 2252. The remand result was lamented by those Justices as "creating additional work for all concerned parties. Developers ... will have no certain way of knowing whether they need to get § 404 permits or not. And the agencies will have to make case-by-case (or category-by-category) jurisdictional determinations, which will inevitably increase the time and resources spent processing permit applications." *Id.* at 2264-5. The recently-issued guidance demonstrates the wisdom of this prediction.

As Chief Justice Roberts noted in a separate concurring opinion in Rapanos, "no opinion commands a majority of the Court on precisely how to read Congress' limits on the reach of the Clean Water Act. Lower courts and regulated entities will now have to feel their way on a case-by-case basis." *Id.* at 2236. Justice Stevens' opinion concluded that because all four Justices who joined the dissenting opinion would uphold the EPA and Corps jurisdiction in tests set forth by either the plurality (by a showing of a continuous surface connection between the wetlands and a relatively permanent body of water connected to a traditional navigable in fact water, even though there may be no significant nexus between the wetlands and the traditional navigable in fact water) or the concurrence (regulate wetlands adjacent to non-navigable waters if the wetlands have a significant nexus to a navigable in fact water) "on remand each of the judgments should be reinstated if either of those tests is met." *Id.* at 2265. But there is no clear roadmap for those left to decide what "navigable waters" means after this decision.

Accordingly, cases decided since *Rapanos* have been academically interesting, but leave stakeholders without much comfort that it will be easy to develop a clear test to will be applied in particular cases. Some interpretations have followed Justice Kennedy's "significant nexus" test. For example, in the Ninth and Seventh Circuits, analyses have been based on Justice Kennedy's test. Northern California River Watch v. City of Healdsburg, 457 F.3d 1023 (9th Cir., 2006), United States v. Gerke Excavating, Inc., 464 F.3d 723 (7th Cir., 2006). Yet the First Circuit expressed some doubts about these other circuits' approaches. United States v. Johnson, 467 F.3d 56 (1st Cir. 2006) A later Ninth Circuit analysis struggled to apply the various *Rapanos* jurisdictional tests to an isolated salt-processing pond. San Francisco Baykeeper v. Cargill Salt Div., 2007 U.S. App. LEXIS 5442 (9th Cir. 2007). And a District Court in Texas declined to apply *Rapanos*. United States v. Chevron Pipe Line Co., 437 F. Supp. 2d 605 (N.D. Tex.

2006). Many more cases are pending.

Earlier this summer, almost a year after the set of *Rapanos* opinions was issued, the Corps and EPA finally issued long-awaited formal guidance on *Rapanos* and how the term "navigable waters" was to be interpreted in terms of regulating waters of the United States, entitled *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States.* I use the term "guidance" loosely in this context, because it does not read as a document that I would find guiding in many cases if I were an EPA or Corps' employee trying to make a particularized decision with respect to a permit application. It leaves more questions unanswered than answered, and in my opinion also leaves unregulated waters that should be regulated based on both original Congressional intent and the language of the *Rapanos* opinion itself, particularly that of Justice Kennedy.

The guidance directs that the agencies automatically assert jurisdiction over the following limited set of waters: traditional navigable waters; wetlands adjacent to traditional navigable waters; non-navigable tributaries of traditional navigable waters that are relatively permanent (i.e., the tributaries typically flow year-round or have continuous flow at least seasonally); and wetlands that directly abut such tributaries. However, for other waters that used to be regulated under the former framework, the agencies now must perform a fact-specific analysis in each case to determine whether such waters have a "significant nexus" with a traditional navigable water. Waters requiring such an analysis include non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally; wetlands adjacent to such tributaries; and wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

To perform the "significant nexus evaluation" agency personnel will have to "assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if in combination they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters." A "significant nexus" is defined to include consideration of hydrologic and ecologic factors. While each permit application or jurisdictional determination does require case-by-case work, such a level of analysis as directed by the guidance will, in the best case, almost surely paralyze an already overworked regulatory staff. In the worst case, it will mean jurisdiction will not be claimed for waters that Congress (and Justice Kennedy) intended be covered by the Clean Water Act, because it is simply to difficult to do the requisite analysis.

The documentation that will be required for an assertion of jurisdiction is potentially daunting. As the guidance suggests, any given record will now need to reflect "all pertinent documentation and analyses" including perhaps (but not necessarily) maps, aerial photography, soil surveys, watershed studies, local development plans, literature citations, and references from studies pertinent to the parameters being reviewed. The level of documentation is anticipated to vary among projects, but what exactly will be enough is entirely unclear. This is sure to lead to frustration among applicants and staff on all levels, and many court battles.

Recent press coverage and other sources suggest that some stakeholder groups had access to early drafts of the guidance document and made strong comments on the original interpretation drafted by the regulatory agencies, which apparently was much broader in terms of interpreting covered waters than the final version. It would thus seem that these apparently one-sided comments may have led to a watered-down version of the guidance.

As the front-line regulator under the Section 404 program, the Corps performs its responsibilities primarily through delegation to district engineers and more than 1,000 regulatory personnel nationwide. On rare occasions, the decisions of district engineers may be "elevated" for review by the very small Corps headquarters' staff or an administrative appeal sought through regional offices. The EPA also has an important regulatory, enforcement and oversight role under 404, which includes the ultimate authority for determining which waters are "waters of the U.S." and the ability to veto permits that a issued by the Corps, an authority very rarely invoked. The EPA has even more authority under other sections of the Clean Water Act.

Each year, the Corps processes close to 90,000 permit applications and about 100,000 jurisdictional determinations under the Section 404 program. Significantly less than one percent of permit applications are denied. Thus the odds are that if you apply for a permit to undertake development or other activities under Section 404, you will receive such a permit. Now, admittedly it does require some investment of resources and take some time for the permit to be processed (particularly if it is a large-impact project necessitating a full individual permit application). But at the end of the day you are highly likely to be issued a permit and allowed to undertake activities in the waters of the United States, if only you ask.

As my recent research has shown in an article published in the May issue of the Environmental Law Reporter entitled *Survey Says: Army Corps No Scalian Despot* (copy attached to this testimony), Customer Service Surveys filled out by applicants after undertaking the process of securing a Corps permit or jurisdictional determination surprisingly reveal that many applicants are delighted with the permitting process. Though some applicants do express concern about the time the permit process requires and have a few other complaints, an impressive percentage of applicants give the Corps perfect marks in their overall ranking of the permitting experience. This belies the claims made by a few permit applicants – and repeated by Justice Scalia in the *Rapanos* plurality opinion – that the Corps regulatory process is overly burdensome and excessively time-consuming for the permitted community. Not only do the data reflecting input from thousands of permitted community representatives nationwide demonstrate that this alleged level of permitting delays and burdens is inaccurate, the data also contradict claims of critics who say that the majority of the regulated community is extremely dissatisfied with what it perceives as an unnecessarily burdensome permitting process. Quite simply, applicants are for the most part not only content, but in many cases quite pleased, with their experiences seeking authorization from the Corps to undertake activities in waters of the United States. There is no reason to believe, therefore, that a return to the pre-*SWANCC* regulatory framework would be overly burdensome on those who must seek permits for activities they wish to undertake.

Yet despite this contentment with the current system, and my belief that Congress was clear back in the 1970's, it is my reluctant conclusion that the time has come to amend the Clean Water Act. One bill currently before Congress, H.R. 2421, the Clean Water Restoration Act, will go far in helping alleviate the confusion that has developed in recent times as to the intended scope of the Act. It should be enacted into law.

I personally believe that this bill could have gone farther in dealing with additional important issues facing our wetlands today. One such issue is jurisdiction over activities in wetlands and the debate that has developed subsequent to the so-called Tulloch rule and interpretations of the term "discharge." After the geographic jurisdictional quandary that H.R. 2421 is intended to address, I believe this is the most important issue facing our nation's waters today. Furthermore, the debate over required mitigation measures is another critical area endangering the future of the nation's waters. Yet even without addressing the authority of the Clean Water Act in these other two other crucial areas, the bill currently before Congress would be an important positive step toward protecting the nation's waters.

I am aware that there are some who have questioned the constitutionality of the pending legislation. Constitutionality is important. Because our federal government is a government of limited powers, it is vital that federal law be based on authority granted pursuant to the United States Constitution. The primary clause of the constitution supporting the Clean Water Act (and many other environmental laws) is the Commerce Clause, U.S. Constitution, article I, section 8. Regulation of our nation's waters, including wetlands, is the quintessential example, in my opinion, of such commerce connections. A recent study by the non-partisan Environmental Law Institute examined this very issue, entitled *Anchoring the Clean Water Act: Congress's Constitutional Sources of Power To Protect the Nation's Waters*, *available at* http://www.elistore.org/reports_detail.asp?ID=11224 (copy attached). That study concluded that "[t]he Commerce Clause has served as the basis for nearly every major environmental and public health law passed by Congress, including the Clean Water Act. Despite repeated legal challenges to the constitutionality of these laws—including laws that of necessity regulate local, intrastate activities affecting land and water resources—neither the Supreme Court nor federal appellate courts have ever struck down an environmental statute as exceeding Congress's commerce power. Instead, the courts have reaffirmed that the Commerce Clause authorizes Congress to engage in three general categories of regulation: direct regulation of the 'channels' of interstate commerce; regulation of the 'instrumentalities' of interstate commerce, and persons or things in interstate commerce; and regulation of 'activities that substantially affect interstate commerce.'" I concur with this analysis, and it is my belief that this proposed legislation, like the Clean Water Act itself, is firmly grounded in the commerce power and that the issues raised by opponents should not derail this important undertaking.

One a related note, scientists have shown the crucial importance of wetlands and headwaters in terms of the ecological function of economically important navigable waters time and again. For example, in 2003, the Society of Wetlands Scientists devoted an entire issue of their quarterly peer-reviewed journal, WETLANDS Vol. 23, Issue 3 to the science of isolated wetlands, in a reflection on the *SWANCC* decision. These scientific articles demonstrated the importance of isolated wetlands to the overall health of varied ecosystems, and in some cases to the condition of nearby waters of the

United States. More recently, in February of this year, the Journal of the American Water Resources Association dedicated Vol. 43 Issue 1 (*available at* http://www.blackwell-synergy.com/toc/jawr/43/1) to scientific analysis of the impact of headwaters on water quality and related issues. I have provided copies of both of these issues to Committee staff for inclusion in the record. Such scientific assessments not only enrich our understanding of the resources as policy decisions are made, they also help assure that requisite commerce clause connections can be demonstrated to those who may express doubts.

I am also aware that some are interpreting H.R. 2421 as potential expanding the reach of the Clean Water Act into places as laughable as birdbaths and kiddie swimming pools, both of which inhabit my backyard. Such claims seem to me a red herring. The language in the pending legislation tracks regulatory language that was used for many years without such overreaching by Corps staff, and there is no reason to think that such interpretations would begin if such legislation were enacted. The legislation as written should reach only to those waters that are essential to the overall health of the nation's waters. A redefinition such as that proposed is not, in my opinion, overreaching. It would rather restore the authority Congress intended to grant decades ago, and which faulty interpretation has eroded. It would also eliminate the enormous confusion that exists in the wake of the *Rapanos* decision and the new guidance.

Before I close, let me remind the Committee members of something I covered briefly above and that you undoubtedly already know. The definition being debated now – the term "navigable waters" and what it means – is not unique to Section 404 of the Act. The term at issue – the definition in section 502 – applies to the entire Act. Thus, decisions made with respect to this definition apply to the Clean Water Act as a whole.

And finally, in closing, I reiterate something I wrote to conclude a recent piece published in a book of essays put out by the top-ranked environmental program at Vermont Law School entitled *Any Hope for Happily Ever After? Reflections on Rapanos and the Future of the Clean Water Act Section 404 Program* (copy attached). My essay was looking at whether a "happy ending" was possible in the recent jurisdictional debates discussed in this testimony. I wrote there:

> [I]t seems to be precisely some new magic words from Congress

> that are needed to rectify this situation. In the parlance of this essay, thus, the rulers of the land will have to revisit and reaffirm their original directive on protecting the nation's waters. Predictions on whether that will be able to happen will, of course, be mixed. But the 110th Congress, with its new political make-up, may offer some hope for passage of clarifying language. Something like the Clean Water Authority Restoration Act, which would redefine "waters of the United States" using the long-standing regulatory language as"all waters subject to the ebb and flow of the tide, the territorial seas, and all interstate and intrastate waters and their tributaries, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and all impoundments of the foregoing, to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution." would be a definite step in the right direction, especially with respect to the jurisdictional matter...

Mr. Chairman and Members of the Committee, I again thank you for inviting me to speak with you today, and would be happy to answer questions at this time.

Attachments:

1. Brief of The Honorable John D. Dingell, The Honorable John Conyers, Jr., The Honorable Robert F. Drinan, The Honorable Gary W. Hart, The Honorable Kenneth W. Hechler, The Honorable Charles Mccurdy Mathias, Jr., The Honorable Paul N. Mccloskey, Jr., The Honorable Charles B. Rangel, And The Honorable Senator Richard Schultz Schweiker, As Amici Curiae In Support of The Respondent, Rapanos v. United States, Carabell v. United States Army Corps Of Engineers, Nos. 04-1034, 04-1384, Supreme Court of The United States, Jan. 13, 2006

2. *Any Hope for Happily Ever After? Reflections on Rapanos and the Future of the Clean Water Act Section 404 Program*, Vermont Law School publication *available at* http://it.vermontlaw.edu/VJEL/Rapanos/7-Connolly.pdf

3. *Survey Says: Army Corps No Scalian Despot,* 37 ENV'L LAW REPORTER 10317 (May 2007)

4. *Anchoring the Clean Water Act: Congress's Constitutional Sources of Power To Protect the Nation's Waters , available at* http://www.elistore.org/reports_detail.asp?ID=11224

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ATTACHMENTS

STATEMENT OF KIM DIANA CONNOLLY

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TO THE

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

HEARING ON
"STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT"

17 JULY 2007

1. Brief of The Honorable John D. Dingell, The Honorable John Conyers, Jr., The Honorable Robert F. Drinan, The Honorable Gary W. Hart, The Honorable Kenneth W. Hechler, The Honorable Charles Mccurdy Mathias, Jr., The Honorable Paul N. Mccloskey, Jr., The Honorable Charles B. Rangel, And The Honorable Senator Richard Schultz Schweiker, As Amici Curiae In Support of The Respondent, Rapanos v. United States, Carabell v. United States Army Corps Of Engineers, Nos. 04-1034, 04-1384, Supreme Court of The United States, Jan. 13, 2006
2. *Any Hope for Happily Ever After? Reflections on Rapanos and the Future of the Clean Water Act Section 404 Program*, Vermont Law School publication *available at* http://it.vermontlaw.edu/VJEL/Rapanos/7-Connolly.pdf
3. *Survey Says: Army Corps No Scalian Despot,* 37 ENV'L LAW REPORTER 10317 (May 2007)
4. *Anchoring the Clean Water Act: Congress's Constitutional Sources of Power To Protect the Nation's Waters* , *available at* http://www.elistore.org/reports_detail.asp?ID=11224

Nos. 04-1034, 04-1384

In The Supreme Court of the United States

◆

JOHN A. RAPANOS, ET AL.,

Petitioners,

v.

UNITED STATES,

Respondent.

◆

JUNE CARABELL, ET AL.,

Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS,

Respondent.

◆

On Writs Of Certiorari To The United States Court Of Appeals For The Sixth Circuit

◆

BRIEF OF THE HONORABLE JOHN D. DINGELL, THE HONORABLE JOHN CONYERS, JR., THE HONORABLE ROBERT F. DRINAN, THE HONORABLE GARY W. HART, THE HONORABLE KENNETH W. HECHLER, THE HONORABLE CHARLES McCURDY MATHIAS, JR., THE HONORABLE PAUL N. McCLOSKEY, JR., THE HONORABLE CHARLES B. RANGEL, AND THE HONORABLE SENATOR RICHARD SCHULTZ SCHWEIKER, AS AMICI CURIAE IN SUPPORT OF THE RESPONDENT

◆

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QUESTIONS PRESENTED

No. 04-1034
Rapanos v. United States

1. Does the Clean Water Act prohibition on unpermitted discharges to "navigable waters" extend to nonnavigable wetlands that do not even abut a navigable water?

2. Does extension of Clean Water Act jurisdiction to every intrastate wetland with any sort of hydrological connection to navigable waters, no matter how tenuous or remote the connection, exceed Congress' constitutional power to regulate commerce among the states?

No. 04-1384
Carabell v. United States Army Corps of Engineers

1. Does the Clean Water Act extend to wetlands that are hydrologically isolated from any of the "waters of the United States"?

2. Do the limits on Congress' authority to regulate interstate commerce preclude an interpretation of the Clean Water Act that would extend federal authority to wetlands that are hydrologically isolated from any of the "waters of the United States"?

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INTEREST OF AMICI CURIAE[1]

Amici are current and former members of the United States Congress, both Republicans and Democrats, all but one of whom were members of the 92nd Congress, which in 1972 initially adopted the pivotal definitions of the Clean Water Act at issue in this case. In addition, the amici include former Senators who were members of the 95th Congress and who voted in 1977 to reaffirm the broad scope of waters protected by the Clean Water Act. All of the amici supported the Clean Water Act and many played critical roles in the development and enactment of the 1972 legislation and the 1977 amendments.

Amici include the following: The Honorable John D. Dingell of Michigan, the "Dean of the House," was elected as a Democrat to the U.S. House of Representatives by special election to the Eighty-fourth Congress and has served from December 13, 1955 to the present; the Honorable John Conyers, Jr. of Michigan was elected as a Democrat to the U.S. House of Representatives to the Eighty-ninth Congress and has served from January 3, 1965 to the present; the Honorable Robert F. Drinan was elected as a Democrat from Massachusetts to the U.S. House of Representatives to the Ninety-second Congress and served from January 3, 1971 to January 3, 1981; the Honorable Gary W. Hart was elected as a Democrat from Colorado to the U.S. Senate in 1974 and served from January 3, 1975 to January 3, 1987; the Honorable Kenneth W. Hechler of West Virginia was elected as a Democrat to the U.S. House of Representatives to the Eighty-sixth Congress and served from January 3, 1959 to January 3, 1977; the Honorable Charles McCurdy Mathias, Jr.

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[1] Under Rule 37.6 of this Court, the parties have consented to the filing of this brief by the Members and former Members of Congress. This brief was not written in whole or in part by counsel for a party, and no one other than amici and counsel made a monetary contribution to its preparation and submission.

of Maryland was elected as a Republican to the U.S. House of Representatives to the Eighty-seventh Congress and served from January 3, 1961 to January 3, 1969, and was elected to the U.S. Senate in 1968 where he served from January 3, 1969 to January 3, 1987; the Honorable Paul N. (Pete) McCloskey, Jr. was elected to the U.S. House of Representatives as a Republican from California by special election to the Ninetieth Congress and served from December 12, 1967 to January 3, 1983; the Honorable Charles B. Rangel of New York was elected as a Democrat to the U.S. House of Representatives to the Ninety-second Congress and has served from January 3, 1971 to the present; and the Honorable Senator Richard Schultz Schweiker of Pennsylvania was elected as a Republican to the U.S. House of Representatives to the Eighty-seventh Congress and served from January 3, 1961 to January 3, 1969, and was elected to the U.S. Senate in 1968 where he served from January 3, 1969 to January 3, 1981.[2]

STATEMENT OF FACTS

Both of these cases involve wetlands that either the U.S. Environmental Protection Agency (EPA) or the U.S. Army Corps of Engineers (Corps) concluded – and the lower courts directly reviewing these cases affirmed – are "[w]etlands adjacent to," 33 C.F.R. § 328.3(a)(7), "tributaries," *id.* § 328.3(a)(5), to "waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce," *id.* § 328.3(a)(1). Accordingly, consistent with Congress' intent, these wetlands are considered "waters of the United States" and thus fall within EPA's and the Corps' authority under the Clean Water Act. See 33 U.S.C. § 1362(7) (defining "navigable waters" as "waters of the United States, including the territorial seas").

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[2] For more complete biographies of these distinguished current and former Members of Congress, go to http://bioguide.congress.gov.

With respect to the three different sites at issue in *Rapanos*, the wetlands were all found to be "adjacent" to tributaries to traditionally navigable waters. The Corps also specifically determined, and the lower courts affirmed as findings of fact, that all three sites have a "hydrological connection to navigable waters." *United States v. Rapanos,* 376 F.3d 629, 635 (6th Cir. 2004). The first site, known as "the Salzburg wetlands," "ha[s] a surface water connection to tributaries of the Kawkawlin River which, in turn, flow into the Saginaw River and ultimately into Lake Huron." *Id.* The second wetlands site, "the Hines Road site[,] ha[s] a surface connection to the Rose Drain which, in turn, has a surface connection to the Tittabawassee River." *Id.* at 642-43. Finally, the third site, "the wetlands at the Pine River . . . have a surface water connection to the Pine River, which flows into Lake Huron." *Id.* at 643.

Similarly, the wetlands at issue in *Carabell* are located next to an unnamed ditch that is connected at one end to the Sutherland-Oemig Drain, which empties into Auvase Creek, which then empties into Lake St. Clair, which connects to Lake Huron and Lake Erie. *Carabell v. United States Army Corps of Engineers*, 391 F.3d 704, 708 (6th Cir. 2004). The other end of the ditch flows into other ditches that also outlet into Auvase Creek and eventually into the Great Lakes drainage system. *Id.* at 705-06. Although berms, which were created when wetland material was excavated to create the unnamed ditch, separate the wetlands from the ditch, the wetlands fall under the regulatory definition of "adjacent wetlands" because that term includes "wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like." 33 C.F.R. § 328.3(c). Despite the clear application of the regulation to their wetlands, the *Carabell* petitioners claim the Corps has no authority to regulate their wetlands because there is no hydrological connection between the wetlands and the ditch as a result of the berms. The Corps maintains that there is an occasional surface water connection when water overtops the berms. *See* BIO at 5, 9. Moreover, the

Corps concluded that the *Carabell* wetlands provide a valuable water storage function, and that filling the wetlands would likely result in "an increased risk of erosion and degradation of water quality" in the traditionally navigable waters of the Great Lakes. 391 F.3d at 706. There is, in other words, a connection between the wetlands and the traditionally navigable waterway because the wetlands slow the flow of the surface water by first retaining it and then allowing it to slowly percolate as ground water. This, in turn, reduces scouring and erosion, which would increase pollution in traditionally navigable waters connected to these wetlands. See generally U.S. EPA, *Functions and Values of Wetlands* 1 (2001), http://www.epa.gov/owow/wetlands/pdf/fun_val.pdf ("Wetlands function like natural tubs or sponges, storing water and slowly releasing it. This process slows the water's momentum and erosive potential, reduces flood heights, and allows for ground water recharge, which contributes to base flow to surface water systems during dry periods.").

SUMMARY OF ARGUMENT

Because wetlands adjacent to traditionally navigable waters, or adjacent to tributaries to those waters, have significant impacts on traditionally navigable waters, Congress intended for them to be subject to regulation under the Clean Water Act. When Congress adopted the Federal Water Pollution Control Act amendments in 1972, it redefined the term "navigable waters" to mean "waters of the United States" for the primary purpose of improving water quality in the Nation. This definition of waters applies broadly to the Act's water pollution control programs, including those aimed at eliminating pollution from industrial waste and raw sewage, preventing oil spills, and regulating the discharge of dredge and fill material.

Thus the EPA's and the Corps' inclusion of tributaries and "adjacent wetlands" in their regulatory definitions of "waters of the United States" and exercise of authority over those waters is consistent with both the statute and Congress' intent. Moreover, the connection between traditionally navigable waters and these waters leaves no doubt that these cases fail to "raise the sort of grave and doubtful constitutional questions," *Rust v. Sullivan*, 500 U.S. 173, 191 (1991), that might require the Court to second-guess the Corps' almost thirty-year-old regulation. Indeed, this Court upheld the regulation of such waters over twenty years ago in *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985), a case that is quite similar to these. Because Congress intended for the Clean Water Act to reach the wetlands at issue here and there is no significant constitutional question raised by EPA and the Corps exercising authority over them, the Court should affirm the judgment of the Court of Appeals for the Sixth Circuit in both cases.

ARGUMENT

I. Congress Plainly Intended to Include All Tributaries and Adjacent Wetlands in the Term "Waters of the United States" and Thereby Subject Them to Regulation Under the Clean Water Act

The Clean Water Act[3] (CWA) defines "navigable waters" as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). The question before this Court is whether the "adjacent wetlands" at issue in these cases are properly considered "waters of the United States" and thus subject to regulation under the Clean Water Act.

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[3] The Federal Water Pollution Control Act is commonly referred to as the Clean Water Act following the 1977 amendments to the FWPCA. Pub. L. No. 95-217, 91 Stat. 1566 (1977) ("SEC. 518. This Act may be cited as the 'Federal Water Pollution Control Act' commonly referred to as the Clean Water Act.").

In *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984), this Court held that when interpreting a statute that an agency is charged with administering, "[i]f the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress." Where one can discern Congress' intent by "employing traditional tools of statutory construction," *id.* at 843 n.9, that intent must be given effect. In this case, the intent of Congress is clear: all tributaries and adjacent wetlands like those at issue in these cases fall under the CWA.

A. Congress Intended to Include Tributaries and Adjacent Wetlands in the Term "Waters of the United States."

In passing the CWA, Congress intended to embrace the broadest possible definition of "navigable waters" when it defined that term as "waters of the United States." In particular, Congress intended that term to embrace both tributaries as well as wetlands that are adjacent to traditionally navigable waterways and wetlands that are adjacent to any tributaries connected to those waterways.

i. Congress Intended Comprehensive Protections Through the 1972 Act

The 1972 adoption of the Federal Water Pollution Control Act (FWPCA) reflected Congressional commitment to comprehensively control water pollution, including protection of tributaries and wetlands. Congress intended in 1972 to replace the original FWPCA, passed in 1948. Federal Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948). That original act was limited to providing technical assistance to states, partially financing municipal sewage treatment works, and providing authority to bring public nuisance lawsuits to abate interstate water pollution when all other means failed.

S. Rep. No. 92-414, at 95 (1971). The 1948 Act left states on their own to establish treatment requirements for pollution sources and to enforce them. Despite this law, by the 1960s the deterioration of the nation's waters was alarmingly evident, and waters in many cities across the country were reduced to sewage receptacles for industrial and municipal waste. *See* Robert W. Adler, Jessica C. Landman and Diane M. Cameron, *The Clean Water Act 20 Years Later* 5-7 (1993).

During the decades leading up to the 1972 Act, the importance of wetlands to overall aquatic ecosystem functioning was steadily becoming apparent in the scientific community. The 1956 Fish and Wildlife Service's publication of Samuel P. Shaw and C. Gordon Fredine's *Wetlands of the United States*[4] provided a new vocabulary – using the generic term "wetlands" in place of terms such as "swamp" or "bog" – that "conveyed positive symbolic value born from trustworthy scientific expertise." Ann Vileisis, *Discovering the Unknown Landscape: A History of America's Wetlands* 209 (1997). Known as Circular 39, the 1956 report articulated a taxonomy of wetland types and clearly explained the value of wetlands as habitat for fish and wildlife. The authors urgently concluded that "[n]ever before in the Nation's history has it been so necessary to plan for the setting aside of land and water areas to serve the future needs of fish and wildlife." Shaw & Fredine, *supra*, at 9. As was true for other water quality matters, leaving wetlands and tributary protection in the control of individual states was not working. Public outcry demanded a strong response. See, e.g., John and Mildred Teal, *Life and Death of the Salt Marsh* 262 (1969) ("This resource is much more extensive – the ribbon of green marshes along the eastern coast of North America, which must be preserved almost in its entirety if its preservation is to have any real meaning."); Kim Diana Connolly, Stephen M. Johnson and Douglas R. Williams, *Wetlands Law and Policy: Understanding Section 404* 2-7 (2006).

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[4] Samuel P. Shaw & C. Gordon Fredine, *Wetlands of the United States: Their Extent and Their Value to Waterfowl and Other Wildlife*, Fish and Wildlife Service Circular 39 (1956), available at http://www.npwrc. usgs.gov/resource/1998/uswetlan/uswetlan.htm.

ii. The Act's Goals and Purposes and Other Provisions Indicate Congressional Intent to Assert Broad Federal Authority Over Concerns Other Than Navigation

In passing the 1972 FWPCA, Congress articulated one of the broadest ecosystem restoration and protection aspirations in all of environmental law: "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251.[5] Courts routinely refer to this objective as the "guiding star" of the statute, see *American Petroleum Institute v. EPA*, 540 F.2d 1023, 1028 (10th Cir. 1976); *Kennecott Copper Corp. v. EPA*, 612 F.2d 1232, 1236 (10th Cir. 1979), or otherwise invoke the language as the main starting point for any analysis, see, e.g., *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700, 703 (1994); *Arkansas v. Oklahoma*, 503 U.S. 91, 101, 105-06 (1992); *United States v. Riverside Bayview Homes*, 474 U.S. at 132.

Congress' 1972 objective was far removed from the limited goal of protecting navigation as in earlier laws like the Rivers and Harbors Act of 1899, 33 U.S.C. § 401 *et seq.* (2000), which prohibited the discharge of refuse into navigable waters "whereby navigation shall or may be impeded or obstructed." 33 U.S.C. § 407. In addition, it broadened the law's focus far beyond pollution in interstate waters as in the earlier iterations of the FWPCA.

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[5] This statutory objective is reinforced in the statutory definition of "pollution" as the "man-made or man-induced alteration of the chemical, physical, biological, and radiological integrity of water." 33 U.S.C. § 1362(19).

Both the House and Senate reports evinced their intent to restore aquatic ecosystems as closely as possible to their natural state, which clearly extends beyond the earlier traditional intent to provide only for navigation.[6]

"To achieve this objective," 33 U.S.C. § 1251(a), Congress listed seven goals, each of which indicates concern for values other than navigability. *Id.* § 1251(a)(1)-(6). The goals of the law, including "protection and propagation of fish, shellfish, and wildlife," "recreation in and on the water," elimination of "the discharge of toxic pollutants in toxic amounts," and "programs for the control of nonpoint source pollution," are broad. *Id.* § 1251(a).

Perhaps most notably, Congress required the states or EPA to adopt water quality standards for all waters covered by the Act "taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, *and also taking into consideration their use and value for navigation.*" *Id.* § 1313(c) (emphasis added). The fact that navigation was but one of many values for which the waters of the United States were provided statutory protection belies a narrow focus on only traditionally navigable waters.

Members of Congress repeatedly emphasized the sweeping purposes of the 1972 amendments. For example, in the debates leading to Congress' override of President Nixon's veto of the legislation, which the President viewed as unconscionably expensive, Representative John D. Dingell of Michigan said: "The protection of our *natural resources*, particularly our waterways which serve our *health and wildlife needs and the recreational needs of*

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[6] S. Rep. No. 92-414, at 12 (1972), *reprinted in* 1972 U.S.C.C.A.N. at 3742; H.R. Rep. No. 92-911, at 76-77 (1972), both quoted *infra*; *see also* Robert W. Adler, *The Two Lost Books in the Water Quality Trilogy: The Elusive Objectives of Physical and Biological Integrity*, 33 ENVTL. L. 29, 44-46 (2003).

urban and rural areas cannot in any sense whatsoever be described as unconscionable." 118 Cong. Rec. 37,058 (Oct. 18, 1972) (emphasis added). In short, Congress sought to protect water quality for a wide range of natural resource values, and not merely to preserve navigability of large waterways.

iii. The Legislative History of the Term "Navigable Waters" Indicates Congressional Intent to Broadly Cover Waters of the United States, Not Just Traditionally Navigable Waters

Both the House and Senate versions of the bills to amend the FWPCA were written to expand federal authority to control and ultimately eliminate discharges of all types of water pollution across the country. H.R. 11,896, 92nd Cong. (1971); S. 2770 92nd Cong. (1971). They both sought to restructure the nation's federal authority to control water pollution while drawing upon much of the structure and language of earlier statutes. Thus, in their original bills, both bodies borrowed the term "navigable waters" from existing laws, and originally included a definition that itself used the term "navigable."[7] However, in the reports discussing their respective versions of the legislation, members of both chambers expressed concern about potentially narrow interpretations of what waters they intended the Act to cover.

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[7] In the Senate, the definition read "the term navigable waters means the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes. S. 2770, 92nd Cong. 502(h) (1971). The House bill's definition read "[t]he term 'navigable waters' means the navigable waters of the United States, including the territorial seas." H.R. 11,896, 92nd Cong. 502(8) (1971).

The House Public Works Committee stated:

> The Committee is reluctant to define the term 'navigable waters.' This is based on the fear that any interpretation would be read narrowly. This is not the Committee's intent. The Committee fully intends the term 'navigable waters' be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."

H.R. Rep. No. 92-911, at 76-77 (1972). The Senate Committee on Public Works likewise stated:

> The control strategy of the Act extends to navigable waters. The definition of this term means the navigable waters of the United States, portions thereof, tributaries thereof, and includes the territorial seas and the Great Lakes. Through a narrow interpretation of the definition of interstate waters the implementation [of the] 1965 Act was severely limited. Water moves in hydrologic cycles and it is essential that discharges of pollutants be controlled at the source. Therefore, reference to the control requirements must be made to the navigable waters, portions thereof, and their tributaries.

S. Rep No. 92-414, at 77 (1971).

Although the House report focused on the need for a broad constitutional interpretation of the Act's scope while the Senate report spoke to the scientific reality of waters being interconnected, both bodies signaled their desire not to constrain the reach of the Act to those waters previously protected solely on the grounds of traditional navigability. In other words, Congress adopted a new view as to the nature of pollution and how to control it at a federal level.

When the House and Senate met in Conference Committee to finalize the 1972 Act, they took an additional step to ensure that the definition of "navigable waters" did not result in unduly narrow interpretations.

As discussed in the report of the Conference Committee, the House version of the definition was accepted into the final bill, but the word "navigable" was deleted from the definition. Thus, the new definition read as follows: "The term 'navigable waters' means waters of the United States, including the territorial seas." S. Rep. No. 92-1236, at 144 (1971). The Conference report adopted the precise terminology of the earlier House Public Works Committee report to confirm that the term "must be given the broadest constitutional interpretation," and proclaimed that the interpretation of this definition must be "unencumbered by agency determinations which have been made or may be made for administrative purposes." *Id.*

Finally, the debate in Congress on final passage of the Act confirmed the conference report's intent that the law be given broad application. Representative Dingell, who reported the conference committee bill to the House, explained the definition in his statement:

> [The] conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographical sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws. The new and broader definition is in line with more recent judicial opinions which have substantially expanded that limited view of navigability – derived from the Daniel Ball case (77 U.S. 557, 563) – to include waterways which would be "susceptible of being used * * * with reasonable improvement," as well as those waterways which include sections presently obstructed by falls, rapids, sand bars, currents, floating debris, et cetera [citing cases]. . . .
>
> [T]his new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as

> determined by the Corps of Engineers, going to govern matters covered by this bill. Indeed, the conference report states on page 144: "The conferees fully intend that the term navigable waters be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."

118 Cong. Rec. 33,756-57 (Oct. 4, 1972).

Particular attention should be paid to Representative Dingell's pivotal opening sentence of the passage, which set the context for the rest of the explanation. He said that "the conference bill defines the term 'navigable waters' broadly for *water quality* purposes." *Id.* (emphasis added). This opening sentence indicates that the new definition should be interpreted "broadly," but more important is the related reasoning. Representative Dingell signaled that the purpose of the bill's expanded jurisdictional definition was to protect water quality as an independent value, and not merely "navigation" or "navigability" as one of the many possible impacts of water pollution on interstate commerce.

The manner in which both the Senate and House committees defined this overriding objective belies any possibility that Congress intended to focus narrowly on navigable waters, as opposed to *all* "waters of the United States" that might affect the ecosystem integrity objective of the law. The 1972 Senate Report, for example, confirms the intent to restore entire aquatic ecosystems to as close as possible to their natural state:

> Maintenance of such integrity requires that any changes in the environment resulting in a physical, chemical or biological change in a pristine water body be of a temporary nature, such that by natural processes, within a few hours, days or weeks, the aquatic ecosystem will return to a state functionally identical to the original. . . .

> In those water bodies which are not pristine, it should be the national policy to take those steps which will result in change towards that pristine state in which the physical, chemical and biological integrity of the water body can be said to exist . . . an objective which minimizes the burden to man in maintaining a healthy environment, and which will provide for *a stable biosphere that is essential to the well-being of human society.*

S. Rep. No. 92-414, at 76 (1972) (emphasis added); see also H.R. Rep. No. 92-911, at 76-77 (1972) (discussing the goal of the legislation as preserving natural ecosystem structure and function).

Because aquatic ecosystems are comprised of intricately connected hydrological systems, the legislative history further reflects Congress' understanding that even traditionally navigable waters could be protected only if the aquatic ecosystem as a whole was protected. In explaining the related definition of "discharge of a pollutant," 33 U.S.C. § 1362(12), for example, Representative Dingell noted that discharges covered by the Act need not be directly to a waterway if pollutants degraded downstream waters after transport over land. 118 Cong. Rec. 33,758. The 1971 Senate Report articulated a similar concept: "Water moves in hydrological cycles and it is essential that discharge of pollutants be controlled at the source." S. Rep. No. 92-414 (Oct. 28, 1971), at 77. Thus, the legislative history repeatedly clarifies that the Act covers not only traditionally navigable waterways, but smaller streams, all tributaries, and wetlands that form components of and are essential to the "chemical, physical, and biological integrity" of the larger aquatic ecosystem. *E.g.*, 118 Cong. Rec. 33,756-57 (Oct. 4, 1972) (Representative Dingell's statement that the bill applied to "all water bodies, including main streams and their tributaries, for water quality purposes"); 118 Cong. Rec. 40,192 (Representative Dingell's statement regarding the need to preserve wetlands); S. Rep. No. 92-414, *supra*, at 77 (coverage of "navigable waters, portions thereof, and their tributaries").

In order to accomplish the above-described jurisdictional expansion, Congress deliberately deleted the term "navigable" from its statutory definition of "navigable waters" in the text of the Act. As one scholar has noted, "after 1972, federal courts and legal commentators began to call 'the navigable waters of the United States' the '*traditional* navigable waters of the United States' to clearly distinguish that term from the much more extensive geographic jurisdiction of the FWPCA of 1972." Lance D. Wood, *Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands (A Response to the Virginia Albrecht/Stephen Nickelsburg ELR Article, the Fifth Circuit's Decision In re Needham, and to the Supreme Court's Dicta in SWANCC)*, 34 ENVTL. L. RPTR. 10,187 (2004); see, e.g., *Hanson v. United States*, 710 F. Supp. 1105, 1108 (E.D. Tex. 1989); *Bayou Des Familles Development Corp. v. U.S. Corps of Engineers*, 541 F. Supp. 1025, 1036 (E.D. La. 1982); *American Dredging Co. v. Dutchyshyn*, 480 F. Supp. 957, 960 (E.D. Pa. 1979); *NRDC v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975).

B. To Meet the Law's Broad Pollution Prevention and Water Quality Goals, Congress Adopted One Definition of "Waters of the United States" To Govern All of the Act's Programs

Petitioners' suggestion that wetlands such as theirs fall outside of the term "navigable waters" is not only contrary to the letter and history of the CWA, it would frustrate Congress' goals in enacting this comprehensive law by excluding from CWA jurisdiction vast amounts of ecologically valuable wetlands adjacent to the innumerable tributaries not considered traditionally navigable waters. This omission would adversely affect water quality, flood control, and habitat for the traditionally navigable water bodies lying downstream. It would also improperly narrow other CWA provisions designed to address the full range of water pollution problems identified by Congress, as these other provisions of the law all rely on the same definition waters in CWA § 502(7). These include CWA § 301, the broad prohibition on discharging into waters without a permit, the CWA § 402 permit program, which covers all polluting discharges other than dredged or fill material, and CWA provisions relating to water quality standards (including CWA § 401), oil pollution prevention and cleanup (CWA § 311), and toxic effluent standards and prohibitions (such as CWA § 307). These regulatory programs administered by EPA all use what is essentially the same definition of "waters of the United States" that the Corps has relied on to implement the § 404 dredge and fill permit program. Opinion of Attorney General Benjamin Civiletti, 43 Op. Att'y Gen. 15.[8]

Tying EPA's and Corps' hands so the agencies cannot effectively protect water quality or eliminate discharges at their source is not what Congress intended in 1972 when it enacted its comprehensive, interstate solution for a perceived national crisis concerning water pollution. Indeed, petitioners' narrow interpretation is directly contrary to Congress' express intent that the term "navigable waters" be given the "broadest possible constitutional interpretation."

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[8] "The term 'navigable waters' . . . is a linchpin of the Act . . . , critical not only to the coverage of 404, but also to the coverage of the other pollution control mechanisms established under the Act. . . . Its definition is not specific to 404, but is included among the Act's general provisions. It is, therefore, logical to conclude that Congress intended that there be only a single judgment as to whether – and to what extent – any particular water body comes within the jurisdictional reach of the federal government's pollution control authority. We find no support either in the statute or its legislative history for a conclusion that a water body would have one set of boundaries for purposes of dredged or fill permits under 404 and a different set for purposes of the other pollution control measures in the Act." 43 Op. Att'y Gen. No. 15, at 5 (Sept. 5, 1979).

C. The Court Should Not Disregard the Agencies' Definition.

Despite the clear intent of Congress to include adjacent wetlands within the definition of "waters of the United States," Petitioners assert that EPA's and Corps' interpretation raises constitutional concerns and therefore the Court should interpret the statute without reference to the agency's regulation. See *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (SWANCC)*, 531 U.S. 159, 172-73 (2001) ("Where an administrative interpretation of a statute invokes the outer limits of Congress' power, we expect a clear indication that Congress intended that result. This requirement stems from our prudential desire not to needlessly reach constitutional issues and our assumption that Congress does not casually authorize administrative agencies to interpret a statute to push the limit of congressional authority." (citation omitted)).

The agency regulations at issue in this case, however, which are faithful to Congress' intent to protect all navigable waters and all of their tributaries, do not even remotely invoke the outer edge of Congress' power. The agencies argued, and the reviewing courts in these cases agreed, that the waters at issue here are all "adjacent" to traditionally navigable waters or tributaries thereto. Therefore, they are governed by 33 C.F.R. § 328.3(a)(7), which applies to "[w]etlands adjacent to" waters such as tributaries, *id.* § 328.3(a)(5), to "waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce," *id.* § 328.3(a)(1).

Notably, this case does not rely on the regulation at issue in *SWANCC*, 33 C.F.R. § 328.3(a)(3), which governs "[a]ll other waters . . . the use, degradation or destruction of which could affect interstate or foreign commerce . . . ," *i.e.*, waters which are *not* navigable themselves, tributary to navigable waters, or wetlands adjacent to such waters. While *amici* do not agree with the treatment of this regulation in *SWANCC,* that regulation is not before the Court under the facts of these cases, and its scope and constitutionality is not at issue here.

Instead, because there is a direct connection between adjacent wetlands and traditionally navigable waters evident in both situations, these cases fall within the first category of Congress' authority under the Commerce Clause to "regulate the use of the channels of interstate commerce." *United States v. Lopez*, 514 U.S. 549, 558 (1995). This power generally "allows Congress to make laws that protect the flow of commerce." *United States v. Deaton*, 332 F.3d 698, 706 (citing *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241, 257 (1964) (upholding congressional power to bar racial discrimination in hotels because this discrimination had a "disruptive effect . . . on commercial intercourse") and *United States v. Darby*, 312 U.S. 100, 114-15 (1941) (upholding congressional power to forbid interstate commerce in goods made by child labor because traffic in such goods encourages "competition . . . injurious to the commerce")).

This Court has repeatedly confirmed Congress' power over waters such as those at issue here without limit to waters that are themselves navigable:

> [I]t cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation. . . . In truth the authority of the United States is the regulation of commerce on its waters. Navigability. . . . is but part of this whole. Flood protection, watershed development, recovery of the costs of improvements through utilization of power are likewise parts of commerce control. . . . [The] authority is as broad as the needs of commerce.

United States v. Appalachian Electric Power Co., 311 U.S. 377, 426-27 (1940); see also *Kaiser Aetna v. United States*, 444 U.S. 164, 173 (1979) ("Reference to the navigability of a waterway adds little if anything to the breadth of Congress' regulatory power over interstate commerce.") (Rehnquist, J.).

As discussed above, Congress intended that the CWA protect water resources broadly. At a minimum, however, by reducing the input of pollutants into waterways, the Act prevents major blockages or other hazards in or impairments to these waters, such as keeping the Cuyahoga River from catching fire, as it did in 1969, due to "a slick of industrial waste." *SWANCC*, 531 U.S. at 174 (2001) (Stevens, J., dissenting); see also *Kernan v. American Dredging Co.*, 355 U.S. 426, 427 (1958) (detailing the death of a seaman due to the ignition of petroleum pollutants floating on the surface of the Schuylkill River in Philadelphia).

Congress' power to ensure that traditionally navigable waters are free of such hazards cannot mean that it may only restrict discharges of pollutants directly into those waters. Discharges into the tributaries and wetlands adjacent to those tributaries can be just as detrimental. As the Sixth Circuit explained:

> It would, of course, make a mockery of [Congress'] powers if its authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. The navigable part of the river could become a mere conduit for upstream waste.

United States v. Ashland Oil & Transp. Co., 504 F.2d 1317, 1326 (6th Cir. 1974); *see also Oklahoma ex rel. Phillips v. Atkinson Co.*, 313 U.S. 508, 523 (1941) ("It is clear that Congress may exercise its control over the non-navigable stretches of a river in order to preserve or promote commerce on the navigable portions."). Accordingly, the regulatory definition of tributary is broad, as Congress intended, and includes all waterbodies that flow into navigable waters. Cf. *United States v. Gerke*, 412 F.3d 804, 805-06 (7th Cir. 2005) ("A stream can be a tributary; why not a ditch? A ditch can carry as much water as a stream, or more; many streams are tiny. It wouldn't make much sense to interpret the regulation as distinguishing between a stream and its manmade counterpart.").

With respect to adjacent wetlands in particular, the Corps explained in 1977 that if adjacent wetlands are polluted or otherwise filled so that they are unable to function, that directly impacts the water quality in the entire aquatic system:

> The regulation of activities that cause water pollution cannot rely on . . . artificial lines [such as the mean tide line and the ordinary high water mark] . . . but must focus on all waters that together form the entire aquatic system. Water moves in hydrological cycles, and the pollution of this part of the aquatic system, regardless of whether it is above or below an ordinary high water mark or mean high tide line, will affect the water quality of the other waters within the aquatic system.

42 Fed. Reg. 37,121, 37,128 (July 19, 1977).

Specifically, water quality in traditionally navigable waters is potentially affected by filling or otherwise polluting adjacent wetlands in three possible ways: (1) pollutants enter a wetland and thus the hydrological system and eventually make their way to traditionally navigable waters, polluting them; (2) a filled or polluted wetland is no longer able to remove pollutants from the water that runs through it as it would normally do, which leads to increased pollution in traditionally navigable waters; and (3) a filled wetland no longer slows and retains water and thus scouring occurs leading to increased erosion and pollution in the traditionally navigable waterways. See U.S. EPA, *Functions and Values of Wetlands*

1 (2001), at http://www.epa.gov/owow/wetlands/pdf/fun_val.pdf (describing the primary functions of wetlands as water storage and water filtration); *United States v. Riverside Bayview Homes*, No. 84-701, Brief for the United States at 3 ("many wetlands purify water by holding nutrients and recycling pollutants"); *id.* at 39 n.29 (providing an extensive explanation of pollutant removal potential of wetlands).

As the record makes clear, the three wetlands at issue in the *Rapanos* case have a demonstrated hydrological connection to the navigable waters and could have any of the three impacts on those waters discussed above were they polluted or filled. Accordingly, they clearly fall within Congress' authority under the Commerce Clause.

With respect to the wetlands at issue in *Carabell*, even if one assumes that there is no surface water connection between the wetlands and the ditch they directly abut, that case too raises no significant constitutional questions. The *Carabell* case is, at a minimum, an example of the third category of water quality impacts resulting from filling or otherwise polluting wetlands. The connection identified by the Corps was that if the *Carabell* wetlands were filled, there would be a significant reduction in the retention of the surface water. This in turn would mean increased scouring and erosion and thus eventually increased pollution in the Great Lakes system. Congress' power under the Commerce Clause surely allows it to prevent significant harms of this sort to traditionally navigable waters.

In sum, the regulations at issue do not raise a "close" constitutional question because they cover only wetlands that are connected to traditionally navigable waters. This Court should therefore follow its usual practice under *Chevron* and conclude that, as Congress intended, the statute unambiguously embraces adjacent wetlands within the definition of "waters of the United States."

In the alternative, if the Court finds that the intent of Congress is not clear, it should afford deference to the Corps' inclusion of adjacent wetlands because it is a reasonable interpretation of the statute, as it did in *Riverside Bayview Homes*. See 474 U.S. at 131-34. Deference to an agency's determination is particularly appropriate when the agency, such as EPA and the Corps here, administers a complex, technical statute. See, e.g., *Pauley v. BethEnergy Mines, Inc.,* 501 U.S. 680, 697 (1991). These regulations are particularly reasonable in that they do not define the term "waters of the United States" to include each and every possible waterbody of the United States but rather, consistent with the extensive legislative history discussed above, only those waters with an impact on traditionally navigable waters.

Moreover, the inclusion of adjacent wetlands that are separated by barriers from traditionally navigable waters or tributaries to those waters is reasonable in that those wetlands are likely to have at least a groundwater connection to the adjacent waterbody. See National Research Council, *Wetlands, Characteristics and Boundaries* 156 (1995) ("Even water quality functions might not be separate for isolated and other wetlands because of the ground water connections between isolated wetlands and surface waters."); R.W. Tiner, H.C. Bergquist, G.P. DeAlessio and M.J. Starr, *Geographically Isolated Wetlands: A Preliminary Assessment of Their Characteristics and Status in Selected Areas of the United States* § 2 (2002), at http://wetlands.fws.gov/Pubs_Reports/isolated/report.htm (even geographically-isolated wetlands can be "connected hydrologically via groundwater connections to other wetlands and to rivers and streams."). In addition, including adjacent wetlands separated by human-made barriers prevents individuals and entities who have constructed or who are tempted to construct barriers or the like between their wetlands and a traditionally navigable water (or a tributary thereto) from evading the Act's requirements. Cf. *Motor Vehicle Manufacturer's Ass'n v. State Farm Mutual Automobile Ins. Co.*, 463 U.S. 29, 42 (1983) ("[A] reviewing court may not set aside an agency rule that is rational, based on consideration of the relevant factors and within the scope of the authority delegated to the agency by the statute.").

II. Under the Facts of Both Cases, Affirmance is Warranted Under *United States v. Riverside Bayview Homes*.

A. Both Cases Are on All Fours With *Riverside Bayview*.

In *Riverside Bayview*, this Court upheld the authority of EPA and the Corps to exercise regulatory jurisdiction under the federal CWA over wetlands, like those at issue here, that are "adjacent to" navigable bodies of water, but that are "not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as 'waters.'" 474 U.S. at 131. The Court also held as a matter of regulatory interpretation that adjacent wetlands do not have to be flooded by surface waters to be included in the regulatory definition of wetlands. *Id.* at 129-31. Although these areas were not connected to traditionally navigable waters via surface hydrology, the District Court found that the soils supported wetland "vegetation that requires saturated soils for growth and reproduction," that the soils were saturated due to ground water, and that "the wetland was adjacent to a body of navigable water, since the area characterized by saturated soil conditions and wetland vegetation extended beyond the boundary of [the] property to Black Creek, a navigable waterway." *Id.* at 130-31. Notably, the District Court did not expressly find a hydrological connection between the waters of either Black Creek or Lake St. Clair and the ground water responsible for soil saturation on the property in question.

The Court in *Riverside Bayview* declined to address, as unnecessary to its decision in the case, whether the Act covers "isolated" as well as adjacent wetlands. *Id.* at 131 n.8. That distinction set the stage for the decision in *SWANCC*, which answered the question in the negative as regards intrastate, isolated ponds connected only by migratory bird use. In *SWANCC*, however, this Court did not disturb the fundamental holding in *Riverside Bayview* that any waters that are adjacent to navigable waters remain subject to CWA jurisdiction. *See SWANCC*, 531 U.S. at 167 (reiterating holding of *Riverside Bayview* as "the Corps had § 404(a) jurisdiction over wetlands that actually abutted on a navigable waterway").

The wetlands at issue in both *Rapanos* and *Carabell* are not like the "isolated" ponds in *SWANCC* but rather are almost identical to the wetlands at issue in *Riverside Bayview*. They all directly abut a tributary that feeds into navigable waters and as such, have direct and tremendous impacts on those waters. Because this Court upheld the regulations in circumstances very similar to these, there is no reason to change course.

B. The History of the 1977 Amendments Relied on in *Riverside Bayview* Further Supports Affirmance.

When drawing a parallel to *Riverside Bayview* in these cases, it is important that the Court acknowledge, as it did in *Riverside Bayview*, Congress' actions and statements indicating that it clearly intended the phrase "navigable waters" to include wetlands, without regard to artificial geographic limitations, when passing the 1977 amendments. See *Riverside Bayview*, 474 U.S. at 137 ("Although we are chary of attributing significance to Congress' failure to act a refusal by Congress to overrule an agency's construction of legislation is at least some evidence of the reasonableness of that construction, particularly where the administrative construction has been brought to Congress' attention through legislation specifically designed to supplant it."); cf. *Minnehaha Creek Watershed Dist. v. Hoffman*, 597 F.2d 617, 626 (8th Cir. 1979) (relying on 1977 legislative history to determine regulatory scope of Section 404 as originally passed).

In 1977, the regulatory battle over the jurisdiction of the Act[9] was reflected by two competing approaches to amending the 404 program considered by Congress. As it had in 1972, the broader approach won out.

The first approach was that taken in the bill reported out of the Senate Environment and Public Works Committee, which sought to address various concerns regarding the implementation of the 404 program, especially workload issues. Most importantly the Committee made clear that "[t]he committee amendment is designed to reaffirm this intent and dispel the widespread fears that the program is regulating activities that were not intended to be regulated." S. Rep. No. 95-370, 95th Cong., 1st Sess. (1977), at 74-75.

In response, during the Senate's floor debate on the 1977 amendments, Senator Lloyd Bentsen of Texas offered an amendment to the Environment and Public Works Committee's bill that would have amended the Act to limit the scope of § 404 to only traditionally navigable waters and their adjacent wetlands. The Congressional Record contains a long debate held before the full Senate voted on the Bentsen plan to narrow the scope of the CWA protections for wetlands and other waters from discharges of dredge and fill material. It is clear from the debate that all agreed that the scope of the Act since 1972 had reached all waters of the United States, and that bill as proposed would not reduce that scope of protection.

As Senator Bentsen himself stated: "The committee has failed to recommend any reduction in the scope of the § 404 permit program. . . . The program would still cover all waters of the United States, including small streams, ponds, isolated marshes, and intermittently flowing gullies." 123 Cong. Rec. 26,711 (Aug. 4, 1977). In supporting this amendment, Senator John Tower of Texas referred to *NRDC v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975) – in which NRDC argued and the district court agreed that the Corps' cramped reading of "navigable waters" was a failure to implement the full statutory mandate of the CWA – when he stated: "A court decision, coupled with an administrative decision, is causing us to be faced with a regulatory scheme which covers not just the rivers of the Nation but all surface waters and wetlands of the United States." 123 Cong. Rec. 26,721-22 (Aug. 4, 1977).

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[9] See generally Sam Kalen, *Commerce to Conservation: The Call for a National Water Policy and the Evolution of Federal Jurisdiction Over Wetlands*, 69 N. D. L. REV. 873, 886-905 (1993).

Opponents of Senator Bentsen's amendment readily acknowledged that the Environment and Public Works Committee's bill maintained the broad jurisdiction enacted in 1972, and argued why Senator Bentsen's amendment to reduce jurisdiction of the Act should be rejected. In particular, Senator Gary Hart of Colorado spoke at length on the shortcomings of the approach advocated by Senator Bentsen:

> The Congress can capitulate. The Congress can abandon the national interest. The Congress can permit activities of a dredge-and-fill nature to go forward on those small streams, marshes, wetlands, and swamps which will make their way into the bigger waterways of this country and have a tremendous adverse effect on the people of this country and on their welfare, on their crops, on many of their activities. Or we can establish a program of the sort the committee has established, which will protect all of those water systems; which will protect all of the elements of those systems, which will not permit dredge and fill activities to deposit very toxic materials into those waterways.

123 Cong. Rec. 26,713 (Aug. 4, 1977). Likewise, Senator John H. Chafee of Rhode Island spoke passionately about the value of wetlands for the whole country and why Senator Bentsen's proposal for eliminating broad federal protection for intrastate waters should be rejected:

> I think it is important to bear in mind that marshes and wetlands are not a parochial responsibility or an asset; they are not a local asset; they are a national asset. They are not just confined within boundaries which happen to exist for any one of our States. The wetlands perform a vital part of the food chain for our wildlife. . . . I should like to stress that these wetlands are not something that belong to Louisiana or Rhode Island or Michigan or Minnesota. They belong to all the citizens. They are much too valuable to be abandoned to some unstable, fragmentary kind of protection. We must bear in mind that these wetlands are part of this larger system. They are not independent. They do not belong only to Minnesota, so that if Minnesota wants to fill them in, it is too bad for the Nation. We have to remember that it affects everything else downstream. There is a linkage between wetlands and streams and estuaries and rivers, and they all must live in harmony, through wise management.

123 Cong. Rec. 26,716-17 (Aug. 4, 1977). Finally, Senator Howard Baker of Tennessee argued that both the Environment and Public Works Committee and courts recognized and were effectuating the common scientific understanding of hydrological linkage between all types of waters:

> Unless Federal jurisdiction is uniformly implemented for all waters, dischargers located on nonnavigable tributaries upstream from the larger rivers and estuaries would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors. Thus, artificially limiting the jurisdiction can create a considerable competitive disadvantage for certain discharges. . . . It is important to understand that toxic substances threaten the aquatic environment when discharged into small

> streams or into major waterways. Similarly, pollutants are available to degrade water and attendant biota when discharged in marshes and swamps, both below and above the mean and ordinary high water marks. . . . Continuation of the comprehensive coverage of this program is essential for the protection for the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource.

123 Cong. Rec. 26,718 (Aug. 4, 1977) (emphasis added). Senator Bentsen's amendment was ultimately defeated by a vote of the full Senate.

The fact that a later Congress debated the value of wetlands when determining the scope of its jurisdiction with respect to an earlier enactment should be afforded "persuasive value" because "[h]ere we have Congress at its most authoritative, adding complex and sophisticated amendments to an already complex and sophisticated act. Congress is not merely expressing an opinion . . . but is acting on what it understands its own prior acts to mean." *Bell v. New Jersey*, 461 U.S. 773, 784-785 & n.12 (1983) (quoting *Mount Sinai Hosp. v. Weinberger*, 517 F.2d 329, 343 (5th Cir. 1975)). Various Members' remarks praising the valuable biological and hydrologic contributions of wetlands, particularly when made during debate over geographic jurisdiction, thus cannot be squared with artificial geographic limits suggested by Petitioners.

In addition to the clear statements of Congress describing the broad jurisdiction of the Act, Representative Don H. Clausen of California referred in his comments to a Library of Congress publication entitled "Case Law Under the Federal Water Pollution Control Act Amendments of

1972." 123 Cong. Rec. 38,976 (Dec. 15, 1977). This document discusses *NRDC v. Callaway* and other cases reaching similar conclusions on the scope of Section 404. As this Court has recognized when considering a different section of the CWA, Representative Clausen's statement and the Library of Congress litigation summary to which he referred demonstrate Congressional awareness that it was rejecting an effort to legislatively overrule that case law interpreting Congressional intent reflecting a very broad jurisdiction of the CWA. See *Chemical Manufacturers Ass'n v. NRDC*, 470 U.S. 116, 128 & n.17 (1985).

Finally, Congressional support for broad geographic jurisdiction is reflected in one of the amendments to Section 404 that Congress did pass in 1977. The addition of subsection (g) to Section 404 thoroughly repudiates any limitation of the Section to traditionally navigable waters as the Petitioners would assert. Section 404(g) provides for state assumption of the Section 404 program under certain conditions. However, Section 404(g)(1) expressly excludes state assumption of jurisdiction over traditionally navigable and tidal waters, "including wetlands adjacent thereto." 33 U.S.C. § 1344(g)(1). Had Congress intended to limit Section 404 to traditionally navigable waters in the first place, this later addition of an option for state assumption of regulation over all other areas would be meaningless because there would be nothing to assume. Section 404's geographic therefore scope must be construed to avoid rendering Section 404(g) meaningless or superfluous.

CONCLUSION

The judgment of the Court of Appeals in both cases should be affirmed.

Respectfully submitted,

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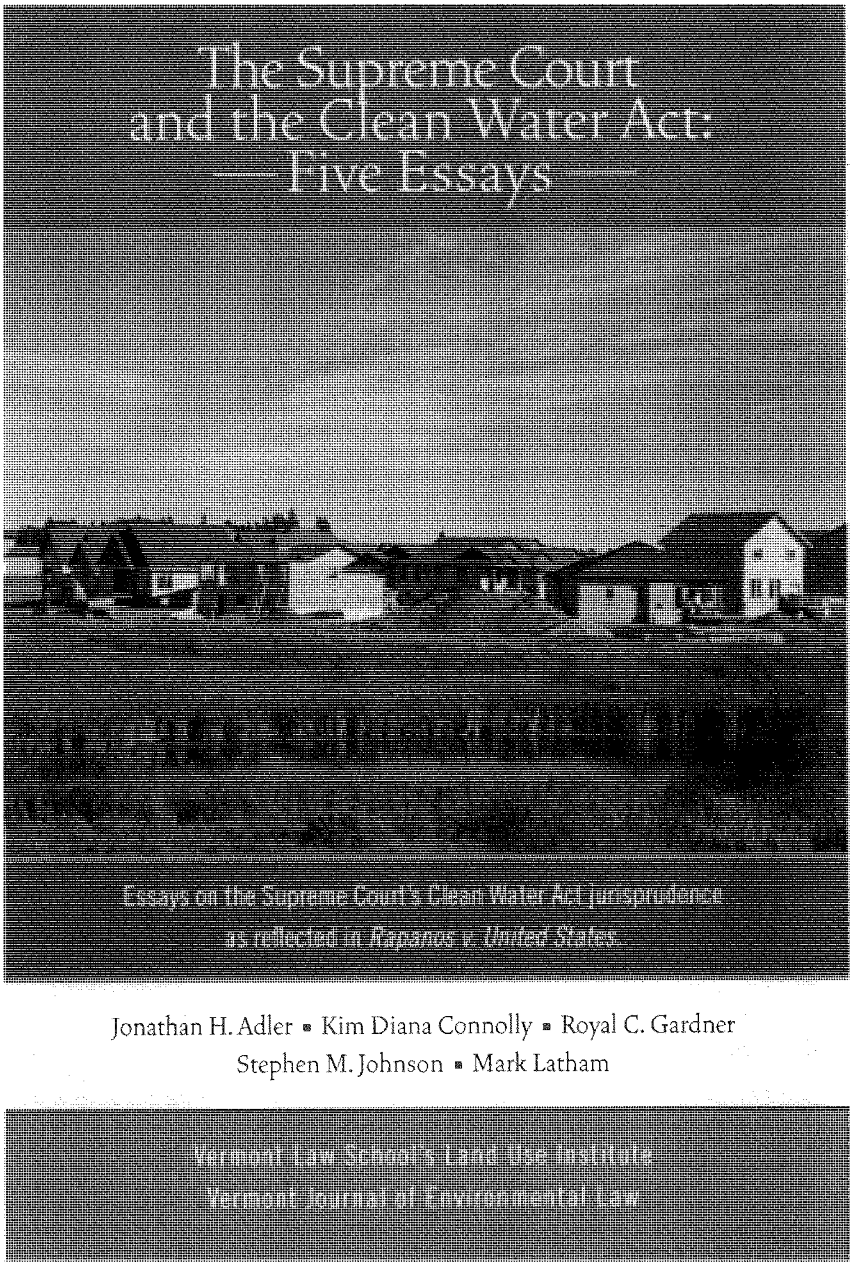

The Supreme Court and the Clean Water Act:
— Five Essays —

Essays on the Supreme Court's Clean Water Act jurisprudence
as reflected in *Rapanos v. United States.*

Jonathan H. Adler ▪ Kim Diana Connolly ▪ Royal C. Gardner
Stephen M. Johnson ▪ Mark Latham

Vermont Law School's Land Use Institute
Vermont Journal of Environmental Law

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Any Hope for Happily Ever After? Reflections on *Rapanos* and the Future of the Clean Water Act Section 404 Program

Kim Diana Connolly[*]

A FAIRY TALE[1] INTRODUCTION

Once upon a time,[2] the rulers of the land[3] gave the United States Army Corps of Engineers ("Corps")[4] important responsibilities to help protect the people of the land.[5] This was so long ago that the Corps went by the name "Corps of Artillerists and Engineers of the Department of War."[6]

It came to pass that the great deciders of the land determined that protecting the people required protecting navigable waters of the land.[7] Accordingly, the rulers of the land eventually passed a new law expanding the Corps' responsibilities to protect the people and navigable waters of the land.[8] This new law made it unlawful "to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure [sic] within the limits of any breakwater, or of the channel of any navigable water" without a Corps permit.[9] As the decades passed, sometimes certain people disagreed with the way the Corps was implementing its responsibility under this new law,[10] but the rulers of the land didn't take that responsibility away.

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[1] At first I believed my daily dose of fairy tales and other children's literature in connection with my two wonderful offspring, Tayte and Simon, inspired this fanciful introduction to this essay. Yet on further reflection I believe my years of observing the realm of Section 404 permitting has led me to conclude that it is well suited to rendition as an imaginary land peopled with whimsical characters.

[2] *See* U.S. Army Corps of Engineers Regulatory Program, *Summary of History*, http://www.usace.army.mil/cw/cecwo/reg/reghist.pdf (last visited Feb. 9, 2007) (stating that the Rivers and Harbors Act, 33 U.S.C. §§ 401 – 467n, was "the first general legislation giving the Corps jurisdiction and authority over the protection of navigable waters.").

[3] For purposes of this essay, the "rulers of the land" are the Senators and Representatives of the United States Congress. The "deciders of the land" are the courts that make up the United States judicial system. *Cf.* Terence Hunt, *Bush, 'The Decider,' Vows More Changes*, ABC NEWS, Apr. 18, 2006, http://www.abcnews.go.com/Politics/wireStory?id=1856539 (last visited Feb. 9, 2007) ("'I hear the voices and I read the front page and I know the speculation,' [President George W. Bush] said testily. 'But I'm the decider and I decide what's best...'").

[4] The main United States Army Corps of Engineers website is located at http://www.usace.army.mil/ (last visited Feb 9, 2007).

[5] This authority came from the Rivers and Harbors Act of 1899 and its precursors. Rivers and Harbors Act of 1899, Ch. 425, 30 Stat. 1121 (1899) (codified as amended at 33 U.S.C. §§ 401-418 (2000)). *See also* Rivers and Harbors Appropriations Act of 1886, Ch. 929, 24 Stat. 310, 329 (1886); Rivers and Harbors Appropriations Act of 1890, Ch. 907, 26 Stat. 426 (1890); River and Harbor Act of 1894, Ch. 299, 28 Stat. 338, 363 (1894); River and Harbor Appropriations Act of 1896, Ch. 314, 29 Stat. 202, 234 (1896).

[6] *See* U.S. Army Corps of Engineers, *History Publications*, http://www.hq.usace.army.mil/history/pubs.htm (last visited Feb 9, 2007) ("In 1794, Congress organized a Corps of Artillerists and Engineers, but it was not until 1802 that it reestablished a separate Corps of Engineers."); *see generally* U.S. Army Corps of Engineers, *U.S. Army Corps of Engineers Brief History*, http://www.hq.usace.army.mil/history/brief.htm#1beg (last visited Feb 9, 2007).

[7] Gibbons v. Ogden, 22 U.S. 1 (1824); The Daniel Ball, 77 U.S. 557 (1871); U.S. v. The Montello, 87 U.S. 430 (1874).

For many decades thereafter, Corps personnel worked hard at their assigned task of protecting these navigable waters.[11] After a few generations passed, the understanding and beliefs of the people of the land underwent a transformation. They realized that much of the land on which they lived, the air that they breathed, and the waters (including the navigable waters that the Corps had been charged with protecting) that they used had become unclean.[12]

At the same time, the people of the land had come to understand that the environment, including the waters of the land and the land nearby those waters, was important for many reasons.[13] These waters supported clean drinking water, reduced flood events, provided habitat for many non-human creatures, supplied opportunities for leisure and amusement, and were beautiful.[14]

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[8] The full text of Section 10 of the Rivers and Harbors Act reads: "That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of War; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure [sic] within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of War prior to beginning the same." 33 U.S.C. § 403 (2000). The Corps' current regulations state in relevant part that "[t]he U.S. Army Corps of Engineers has been involved in regulating certain activities in the nation's waters since 1890." 33 C.F.R. § 320.1(a)(1) (2006).

[9] *Id.*

[10] *See generally* William Andreen, *The Evolution of Water Pollution Control in the United States: State, Local and Federal Efforts, 1789 - 1972: Part II*, 21 STAN. ENVTL. L.J. 215-294 (2003); William Andreen, *The Evolution of Water Pollution Control in the United States: State, Local and Federal Efforts, 1789-1972: Part I*, 21 STAN. ENVTL. L.J. 145-200 (2003).

[11] As much disagreement as I have at times with Corps Headquarters-level (and higher) decisions, I have the utmost respect for most Corps employees working in the field for the regulatory program. I have formed these views, in part, through annual opportunities for extended discussions with different members of the Corps regulatory staff from around the country, by serving as an instructor for the PROSPECT course Environmental Laws and Regulations since 1998. *See* USACE Learning Center, ENVIRONMENTAL LAWS & REGULATIONS (Control Number: 170, Course Number: 33ELR01A), *available at* http://pdsc.usace.army.mil/CourseListDetail.aspx?CtrlNbr=170(last visited Feb 9, 2007); Environmental Partners, www.environmentalpartners.net/(last visited Feb 9, 2007).

[12] *See generally* Senator Gaylord Nelson, *How the First Earth Day Came About*, http://earthday.envirolink.org/history.html (last visited Feb. 9, 2007) (noting that during the early and mid-1960's in nationwide speeches, he determined that "[a]ll across the country, evidence of environmental degradation was appearing everywhere, and everyone noticed except the political establishment. The environmental issue simply was not to be found on the nation's political agenda. The people were concerned, but the politicians were not."); U.S. Environmental Protection Agency, *History – Earth Day*, http://epa.gov/history/topics/earthday/index.htm (last visited Feb. 9, 2007). *See also* ROBERT W. ADLER, JESSICA C. LANDMAN AND DIANE M. CAMERON, THE CLEAN WATER ACT 20 YEARS LATER 5-7 (1993).

And so the people sought to generate a new ethos of caring for the environment.[15] The rulers of the land listened, and created inventive ways to protect the environment through various new laws.[16]

One of these new laws, which came to be known as the Clean Water Act,[17] gave even more responsibility to the Corps in terms of protecting the waters of the land.[18] This responsibility was shared with a newcomer to the land, the United States Environmental Protection Agency (EPA).[19] Together, the Corps and EPA[20] tried to protect the waters as the rulers had directed by creating a permit process for discharges of dredged or fill materials into newly-defined "navigable waters."[21] As before, sometimes certain people did not think these agencies were properly implementing the directives from the rulers of the land.[22] Nevertheless, the Corps and EPA came to deal with a multitude of the inhabitants of the land every year[23] who wanted to do things on their property that might impact the waters of the land.

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[13] *See, e.g.*, JOHN AND MILDRED TEAL, LIFE AND DEATH OF THE SALT MARSH (1969).

[14] *See generally* NAT'L ACAD. OF SCIENCES, NAT'L RESEARCH COUNCIL, WETLANDS: CHARACTERISTICS AND BOUNDARIES (1995), *available at* http://www.nap.edu/books/0309051347/html/index.html (last visited Feb. 9, 2007); U.S. Army Corps of Engineers, *Technical and Biological Information, available at* http://www.usace.army.mil/inet/functions/cw/cecwo/reg/techbio.htm (last visited Feb. 9, 2007); U.S. Envtl. Prot. Agency, *Functions and Values, available at* http://www.epa.gov/owow/wetlands/functions.html (last visited Feb. 9, 2007); Iowa Dept. of Agric., Soil Conservation Serv., Iowa Wetland *Restoration and Conservation Plan, Chapter 4: Functions and Values of Wetlands and Riparian Areas, available at* http://www.ag.iastate.edu/centers/iawetlands/download.html (last visited Feb. 9, 2007). *See also* Brief of Ecological Society of America, Society of Wetland Scientists, American Society of Limnology and Oceanography, and Estuarine Research Federation As Amici Curiae in Support of Respondents, Rapanos v. United States, Carabell v. United States Army Corps Of Engineers, 126 S.Ct. 2208 (2006) (Nos. 04-1034, 04-1384), Supreme Court of The United States, Jan. 13, 2006, *available at* http://www.eswr.com/1105/rapanos/rapamicesa.pdf (last visited Feb. 9, 2007).

[15] *See* Library of Congress, *Today in History: April 22 – Earth Day*, http://memory.loc.gov/ammem/today/apr22.html (last visited Feb. 9, 2007), *Earth Day History*, http://www.themesh.com/abouted.html (last visited Feb. 9, 2007). One scholar reported that "[o]n August 31, [1970] Senator Ted Stevens of Alaska complained: 'Suddenly out of the woodwork come thousands of people talking about ecology.'" Jack Lewis, *The Birth of EPA*, EPA JOURNAL, Nov. 1985, *available at* http://www.epa.gov/history/topics/epa/15c.htm (last visited Feb. 9, 2007).

[16] *See generally* RICHARD J. LAZARUS, THE MAKING OF ENVIRONMENTAL LAW (Univ. Chicago 2004). *See also* Natural Res. Def. Council, *E-law: What Started It All?, available at* http://www.nrdc.org/legislation/helaw.asp (last visited Feb. 9, 2007); William Andreen, *The Evolving Law of Environmental Protection in the United States: 1970-1991*, 9 ENVTL. AND PLANNING L.J. 96 (1992).

[17] Pub. L. No. 92-500, 86 Stat. 816 (1972), *as codified in* 33 U.S.C. §§ 1251-1387 (2000), further amended in Pub. L. No. 95-217, 91 Stat. 1567 (1977); Pub. L. No. 100-4, 101 Stat. 45 (1987).

[18] Specifically, Section 404 provided permitting authority to Secretary of the Army to "issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites." 33 U.S.C. § 1344 (2000).

[19] The National Archives, *Records of the Environmental Protection Agency [EPA]*, http://www.archives.gov/research/guide-fed-records/groups/412.html#412.1 (last visited Feb. 9, 2007).

[20] The EPA summarizes its role in Section 404 permitting as follows: "Develops and interprets policy, guidance and environmental criteria used in evaluating permit applications; Determines scope of geographic jurisdiction and applicability of exemptions; Approves and oversees State and Tribal assumption; Reviews and comments on individual permit applications; Has authority to prohibit, deny, or restrict the use of any defined area as a disposal site (Section 404(c)); Can elevate specific cases (Section 404(q)); Enforces Section 404 provisions." U.S. Environmental Protection Agency, *Wetland Regulatory Authority, available at* http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf (last visited Feb. 9, 2007).

But the voices of those who thought the Corps was not doing a good job (often for different reasons) have continued to roar, and much time has been invested fighting about whether the Corps (and EPA) were correctly following the directions from the rulers of the land under Clean Water Act Section 404.[24] These battles have been on many fronts, including what activities the Corps could control,[25] what compensation should be required if waters of the land were impacted,[26] and exactly which land and waters the Corps could control.

It is this last battlefront that is the focus of this fairy-tale essay: exactly which waters of the land[27] did the rulers of the land mean for the Corps and EPA to defend?

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[21] *See infra* notes 42-86 and accompanying text for discussion of the controversy surrounding the definition of "navigable waters" under the Clean Water Act.

[22] *See, e.g.*, Leslie Salt Co. v. Froehlke 578 F.2d 742 (9th Cir. 1978); Minnehaha Creek Watershed Dist. v. Hoffman, 597 F.2d 617 (8th Cir. 1979); Avoyelles Sportsmen's League, Inc. v. Alexander 511 F. Supp. 278 (W.D. La 1981), *aff'd in part and rev'd in part on other grounds*, 715 F.2d 897 (5th Cir. 1983); Alma v United States, 744 F. Supp. 1546 (S.D. Ga 1990).

[23] U.S. Army Corps of Engineers, *Regulatory Statistics*, *available at* http://www.usace.army.mil/cw/cccwo/reg/reg_stat.htm (last visited Feb. 9, 2007).

[24] Administrative appeals are the most recent innovation through which permit applicants (and those seeking jurisdictional determinations) can seek redress for their grievances with the permitting process. Administrative Appeal Process Establishment for the Regulatory Program of the Corps of Engineers; Final Rule, 64 Fed. Reg. 11708 (Mar. 9, 1999); Final Rule Establishing an Administrative Appeal Process for the Regulatory Program of the Corps of Engineers, 65 Fed. Reg. 16486 (Mar. 28, 2000) (codified at 33 C.F.R. pt. 331 (2006)). The numbers of those seeking such appeals are low: less than one hundred typically are sought nationwide each year. *See* U.S. Army Corps of Engineers, Administrative Appeals Process, http://www.usace.army.mil/cw/cecwo/reg/appeals.htm (last visited Feb. 9, 2007). *See generally* Kim Diana Connolly, Stephen M. Johnson & Douglas R. Williams, Wetlands Law and Policy: Understanding Section 404, Ch. 11, *The Administrative Appeals Process* (2005).

[25] Under the Clean Water Act, permits only are required for "discharges" into navigable waters. 33 U.S.C. § 1344(a) (2000). Controversy about what "discharge" includes have been significant. *See* Nat'l Mining Ass'n v. U.S. Army Corps of Eng'rs, 145 F.3d 1399 (D.C. Cir. 1998); Borden Ranch P'ship v. U.S. Army Corps of Eng'rs, 261 F.3d 810, 815 (9th Cir. 2001), *aff'd by an equally divided court*, 537 U.S. 99 (2002). For a detailed overview of the issue, *see* Kim Diana Connolly, Stephen M. Johnson & Douglas R. Williams, Wetlands Law and Policy: Understanding Section 404, Ch. 4, *Regulated Activities* (2005).

[26] *See* Envtl. Prot. Agency, U.S. Army Corps of Engineers, and the U.S. Departments of Agric., Commerce, Interior, and Transp., *Nat'l Wetlands Mitigation Action Plan*, (Dec. 24, 2002), *available at* http://www.mitigationactionplan.gov/map1226withsign.pdf (last visited Feb. 9, 2007). *See generally* Kim Diana Connolly, Stephen M. Johnson & Douglas R. Williams, Wetlands Law and Policy: Understanding Section 404, Ch. 8, *Mitigation* (2005).

[27] The Corps devotes an entire section of its portion of the Code of Federal Regulations to defining "waters of the United States." 33 C.F.R. pt. 328 ("This section defines the term 'waters of the United States' as it applies to the jurisdictional limits of the authority of the Corps of Engineers under the Clean Water Act. It prescribes the policy, practice, and procedures to be used in determining the extent of jurisdiction of the Corps of Engineers concerning 'waters of the United States.' The terminology used by Section 404 of the Clean Water Act includes 'navigable waters' which is defined at Section 502(7) of the Act as 'waters of the United States including the territorial seas.' To provide clarity and to avoid confusion

The battles about this subject have continued since passage of the Clean Water Act,[28] and those who depend on the waters (including many people of the land as well as other animal inhabitants)[29] are left in confusion and dismay.

In a traditional fairy tale, a knight or prince (or princess) of some sort would now undertake a brave quest or valiant battle and set things right, allowing the people of the land to live happily ever after.[30] However, as the more formal part of the essay below will explore, although the next verse in the saga of our nation's waters remains unwritten, such a dénouement is unlikely, at least any time in the near future.

The truth of the matter is that the Corps, as the primary regulator of the waters of the United States under Clean Water Act Section 404,[31] processes tens of thousands of permits annually[32] and will have to continue to do so. The latest Supreme Court result makes that job a bit harder, but actually not all that different than the difficult job the rulers of the land bestowed on the Corps lo those many years ago. In every permit application, the Corps has to make a case-by-case decision.[33] To that end, this essay concludes that the rulers of the land (with the indirect assistance of the Corps and the

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with other Corps of Engineer regulatory programs, the term 'waters of the United States' is used throughout 33 CFR Part 320-330." 33 C.F.R. § 328.1 (2006)).

[28] *See infra* Part II.

[29] The direct role of wetlands in the wellbeing of people is perhaps best captured in the international arena. *See* Ramsar Convention on Wetlands, *World Wetlands Day, 2 February*, http://www.ramsar.org/wwd/wwd_index.htm (last visited Feb. 9, 2007) (for example, the 2007 focus of World Wetlands Day was fisheries, "in recognition of: * the needs of the one billion people who rely on fish as their primary source of animal protein; [and] * the state of the world's fisheries where 75% of commercially important marine and most inland water fish stocks are either currently overfished or being fished at their biological limit, and where the effects of unsustainable aquaculture practices on wetland ecosystems are of growing concern." http://www.ramsar.org/wwd/7/wwd2007_index.htm (last visited Feb. 9, 2007) and the 2006 focus of World Wetlands Day was livelihoods, with the Ramsar Secretary General noting that "[l[ivelihoods of wetland dependant people depend fully on water production and protection agriculture, livestock grazing, fisheries and handicraft industry - and inappropriate wetland management, unwise use, and of course droughts, can cause complete breakdown of the rural sustainable livelihoods, with poverty as a result." http://www.ramsar.org/wwd/6/wwd2006_atext3e.htm (last visited Feb. 9, 2007)).

[30] *See generally* Marvels and Tales: Journal of Fairy Tale Studies, *Index of Articles and Scholarship in Translation*, http://www.langlab.wayne.edu/MarvelsHome/articles.html#w (last visited Feb. 9, 2007).

[31] *See generally* Permits for Discharges of Dredged or Fill Material Into Waters of the U.S., 33 C.F.R. pt. 323 (2006).

[32] *See* U.S. Army Corps of Engineers, *US Army Corps of Engineers Regulatory Program* (2003) [hereinafter *Regulatory Statistics*], *available at* http://www.usace.army.mil/inet/functions/cw/cecwo/reg/2003webcharts.pdf (last visited Feb. 9, 2007). The latest statistics available on-line are from FY 2002 and FY 2003. *Id.* They show that in 2002, there were + 81,302 permits applied for and in 2003, there were 86,177 permits applied for. These numbers include general permits.

[33] *See generally* KIM DIANA CONNOLLY, STEPHEN M. JOHNSON & DOUGLAS R. WILLIAMS, WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404 (American Bar Ass'n, 2005). A series of questions are set forth via a "checklist" format in the first chapter of that book that initiate with the queries:

"1) Does the federal government have geographic jurisdiction over the project you are proposing?

a) May the project area properly be delineated as a wetland?

2) Assuming the project area does include wetlands, are these wetlands 'navigable waters'/'waters of the United States'?"

Id. at 9.

deciders of the land) have crafted a dysfunctional permitting program, and that the *Rapanos* decision[34] is another in a long line of exhibits that shows the program doesn't work as it should or could.[35]

Accordingly, although in the summer of 2006 the great deciders provided the varied stakeholders in the wetlands world (including the regulated community, the conservation community, those with land neighboring areas proposed for permitting, and the regulators themselves) no clear direction as to how to proceed with activities that might impact wetlands and other waters of the United States, this is not much of a change from the situation before the *Rapanos* decision was issued. Nevertheless, the continued battles and increased confusion will waste precious energy that would be better directed toward coming together to create a functional permitting process, which almost certainly will require amendment of the relevant statutory language.

Following this introduction, Part II of this essay contains a brief overview of the *Rapanos* decision and events leading up to it, followed by Part III which provides an overview of the Corps permitting process. The concluding section, Part IV, attempts to address the outstanding question presented by this essay: can there ever be a "happily ever after"[36] when it comes to protections for wetlands and other waters of the land?[37]

I. THE *RAPANOS* DECISION AND ITS PRECURSORS

In June 2006, the United States Supreme Court undermined already difficult-to-implement legal protections for wetlands and other waters of the United States by issuing its *Rapanos* decision.[38] Although the outcome was not as restrictive as the plurality would have liked,[39] the fractured opinion left this hotly contested area of law with increased confusion[40] and guaranteed continued combat.[41] The issue was the interpretation of Congress' term "navigable waters,"[42] defined as "waters of the United States."[43] This is not a new battle – it was in fact waged immediately after passage of what came to be known as the Clean Water Act.[44]

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[34] Rapanos v. United States, 126 S.Ct. 2208 (2006).

[35] Pointing out the failures of the permitting process has been well done by scholars who have come before. *See, e.g.*, Michael C. Blumm & D. Bernard Zalcha, *Federal Wetlands Protection Under the Clean Water Act: Regulatory Ambivalence, Intergovernmental Tension, and a Call for Reform*, 60 U. COLO. L. REV. 695 (1989); Oliver A. Houck, *Hard Choices: The Analysis of Alternatives Under Section 404 of the Clean Water Act and Similar Environmental Laws*, 60 U. COLO. L. REV. 773 (1989); Hope Babcock, *Federal Wetlands Regulatory Policy: Up to Its Ears in Alligators*, 8 PACE ENVTL. L. REV. 307 (1991); Timothy D. Searchinger, *Wetlands Issues 1993: Challenges and a New Approach*, 4 MD. J. CONTEMP. LEGAL ISSUES 13 (1993), Michael C. Blumm, *The Clinton Wetlands Plan: No Net Gain in Wetlands Protection*, 9 J. LAND USE & ENVTL. L. 203 (1994); Alyson C. Flournoy, *Section 404 at Thirty-Something: A Program in Search of a Policy*, 55 ALA. L. REV. 607 (2004).

[36] I have always found it delightful that non-English languages have adopted the term "Happy End" or "Happy Ending" directly from our language. *See, e.g.* Wordreference.com, English-French dictionary, http://www.wordreference.com/enfr/happy (last visited Feb. 9, 2007); About, *The Denglish Dictionary*, http://german.about.com/library/blvoc_denglish3.htm (last visited Feb. 9, 2007).

[37] As I concluded in an earlier opinion authored shortly after the *Rapanos* decision was issued, to the extent that fodder for law review articles and interesting class hypotheticals creates happiness for law professors, the Court's decision did indeed create some happy moments (though not a traditional "happily ever after") for the academic community. Kim Diana Connolly, SCOTUS Blog, *More on Rapanos/Carabell*, http://www.scotusblog.com/movabletype/archives/2006/06/more_on_rapanos_3.html (last visited Feb. 9, 2007)

[38] 126 S.Ct. 2208 (2006). *See generally* Robert Meltz, Claudia Copeland, *The Wetlands Coverage of the Clean Water Act is Revisited by the Supreme Court: Rapanos v. United States* (Congressional Research Service, Sept. 12, 2006), *available at* http://www.cnie.org/NLE/CRSreports/06Oct/RL33263.pdf (last visited Feb. 9, 2007). For background materials on the cases, including the original Carabell permit application and associated documentation as well as the Rapanos enforcement documents, *see* Kim Diana

Congress articulated its broad ecosystem restoration and protection aspirations in enacting the Clean Water Act by stating an intention "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[45] To that end, the Act prohibits "the discharge of any pollutant by any person" without a permit issued in compliance with the Act.[46] The Act defines the "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source."[47] To comply with these requirements, therefore, Section 404 of the Act requires all persons to obtain a

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Connolly, *US Supreme Court Rapanos and Carabell Wetlands Cases*, http://www.law.sc.edu/wetlands/rapanos-carabell/ (last visited Feb. 9, 2007). *See also* James Murphy, *Muddying the Waters of the Clean Water Act:* Rapanos v. United States *and the Future of America's Water Resources*, 31 VERMONT L.R. 355 (2007).

[39] Writing for the plurality, Justice Scalia opined that "waters of the United States" should include "only those relatively permanent, standing or continuously flowing bodies of water forming geographic features that are described in ordinary parlance as streams ... oceans, rivers [and] lakes. The phrase does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall." 126 S.Ct. at 2225. Justices Thomas, Alito and Roberts joined that opinion. *Id.* at 2214.

[40] *See* compiled initial press coverage at Kim Diana Connolly, *U.S. Supreme Court Rapanos and Carabell Wetlands Cases*, http://www.law.sc.edu/wetlands/rapanos-carabell/carabell.shtml#press_coverage (last visited Feb. 9, 2007). *See also* Ass'n of State Wetland Managers, *Rapanos/Carabell*, http://www.aswm.org/fwp/rapanos_state2006.htm (last visited Feb. 9, 2007); Jon A. Mueller, *Adjacent Wetlands: Is Your Nexus Significant? Rapanos v. United States*, Daily Env't Rep. Analysis and Perspective, Mar. 12, 2007, *available at* http://pubs.bna.com/NWSSTND/IP/BNA/DEN.NSF/SearchAllView/35AF1F7BA69BB2088525729A000BF59A?Open&highlight=RAPANOS,GUIDANCE#%3C~A0B4D2N5D7~%3E (last visited Mar. 15, 2007).

[41] *Compare* Pacific Legal Foundation, *Rapanos Blog*, http://rapanos.typepad.com (last visited Feb. 9, 2007) with Clean Water Network, *Supreme Court Delivers Murky Ruling on Carabell and Rapanos*, http://www.cleanwaternetwork.org//issues/scope/getengaged/displaycontent.cfm?ContentID=388&ContentTypeID=4&PageFormat=DisplayContent&ConfigID=146 (last visited Feb. 9, 2007). *See also* Georgetown University Law Center, *The Clean Water Act in the Supreme Court: the* Rapanos *and* Carabell *Decisions*, http://www.podcastdirectory.com/podshows/626338 (last visited Feb. 9, 2007); Akin Gump, *SCOTUS Blog*, http://www.scotusblog.com/movabletype/archives/2006/06/discussion_boar_1.html (last visited Feb. 9, 2007).

[42] 33 U.S.C. § 1344 (2000).

[43] Congress defined "navigable waters" as "waters of the United States, including the territorial seas." *Id.* § 1362(7).

[44] The Federal Water Pollution Control Act (FWPCA) is commonly referred to as the Clean Water Act following the 1977 amendments to the FWPCA. Pub. L. No. 95-217, 91 Stat. 1566 (1977) ("SEC. 518. This Act may be cited as the 'Federal Water Pollution Control Act' commonly referred to as the Clean Water Act.").

[45] 33 U.S.C. § 1251(a) (2000). To achieve this objective, Congress listed seven goals, each of which indicates concern for values other than navigability. *Id.* § 1251(a)(1)-(6). These broad goals of the law include "protection and propagation of fish, shellfish, and wildlife," "recreation in and on the water," elimination of "the discharge of toxic pollutants in toxic amounts," and "programs for the control of nonpoint source pollution." *Id.*

[46] *Id.* § 1311(a).

[47] *Id.* § 1362(12).

permit from the Corps "for the discharge of dredged or fill material into the navigable waters at specified disposal sites."[48] The fact that the term "navigable waters" was defined by Congress only as "waters of the United States, including the territorial seas,"[49] however, led to some confusion after passage of the Act.

This confusion was quickly addressed[50] in (among other decisions) a 1975 District Court challenge to the Corps' overly narrow initial interpretation of its Clean Water Act jurisdiction.[51] The court held that the Corps' constricted construction was wrong because Congress had "asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution."[52] Given that directive, the Corps of Engineers shortly thereafter issued more appropriate regulations[53] (which are essentially the same today), asserting jurisdiction beyond traditionally navigable waters to interstate waters, other waters for which commerce connections can be found, and impoundments and tributaries of same.[54]

A 1972 report from a House Committee supported this interpretation by stating that the term "navigable waters" should "be given the broadest possible constitutional interpretation unencumbered by agency determinations ... made for administrative purposes."[55] Likewise, Representative John Dingell explained during consideration in 1972 that the new Act "clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill."[56]

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[48] *Id.* § 1344(a).

[49] *Id.* § 1362(7).

[50] An excellent detailed history of the development of Section 404 law can be found in Sam Kalen, *Commerce to Conservation: The Call for a National Water Policy and the Evolution of Federal Jurisdiction Over Wetlands*, 69 N.D. L. REV. 873, 877-905 (1993). *See also* James R. Curtiss, Note, *The Clean Water Act of 1977: Midcourse Corrections In The Section 404 Program*, 57 NEB. L. REV. 1092, 1094-1107 (1978).

[51] Nat'l Res. Defense Council v. Callaway, 392 F. Supp. 685 (D.D.C. 1975) (rejecting Corps' position that Section 404's jurisdiction limited to waters meeting traditional tests of navigability).

[52] *Id.* at 686. *See also* United States v. Ashland Oil & Transportation Co., 504 F.2d 1317 (6th Cir. 1974) where the United States Court of Appeals for the Sixth Circuit interpreted the Conference Report's reference to the "the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes" to mean that Congress intended that the Act reach any activity that substantially affects commerce.

[53] 40 Fed. Reg. 31,320 (1975).

[54] The definition as it appears in full in the regulations reads as follows: "The term 'waters of the United States' means:
(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a)(1)–(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)–(6) of this section.
(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal Agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States." 33 C.F.R. § 328.3(a) (2006).

Yet the 1975 regulatory interpretation led to significant controversy,[57] in light of which Congress re-examined the intended breadth of the program in its 1977 reauthorization of the Clean Water Act.[58] As the Supreme Court acknowledged in a later case,[59] Congress' actions and statements indicated that it clearly intended the phrase "navigable waters" to include wetlands, without regard to artificial geographic limitations, when it passed the 1977 amendments.[60]

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[55] H.R. Rep. No. 911, 92d Cong., 2d Sess. 131 (1972).

[56] 118 Cong. Rec. 33757 (1972). Representative Dingell's remarks as reprinted in the Congressional Record read, in part, as follows:

[T]he conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographical sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws.

The new and broader definition is in line with more recent judicial opinions which have substantially expanded that limited view of navigability -- derived from the Daniel Ball case (77 U.S. 557, 563, [10 Wall. 557, 19 L. Ed. 999]) -- to include waterways which would be "susceptible of being used * * * with reasonable improvement," as well as those waterways which include sections presently obstructed by falls, rapids, sand bars, currents, floating debris, et cetera.

The U.S. Constitution contains no mention of navigable waters. The authority of Congress over navigable waters is based on the Constitution's grant to Congress of "Power * * * To regulate commerce with Foreign Nations and among the several States * * *" (art. I, sec. 8, clause 3). Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1 [6 L. Ed. 23] (1824). Although most interstate commerce 150 years ago was accomplished on waterways, there is no requirement in the Constitution that the waterway must cross a State boundary in order to be within the interstate commerce power of the Federal Government. Rather, it is enough that the waterway serves as a link in the chain of commerce among the States as it flows in the various channels of transportation -- highways, railroads, air traffic, radio and postal communication, waterways, et cetera. The "gist of the Federal test" is the waterway's use "as a highway," not whether it is "part of a navigable interstate or international commercial highway." Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill. Indeed, the conference report states on page 144: "The conferees fully intend that the term navigable waters be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes." *Id.* at 33756-57.

[57] James R. Curtiss, Note, *The Clean Water Act of 1977: Midcourse Corrections In The Section 404 Program*, 57 NEB. L. REV. 1092, 1103-7 (1978).

[58] *See generally id.* 1107-1112; Michael C. Blumm, *The Clean Water Act's Section 404 Permit Program Enters Its Adolescence: An Institutional and Programmatic Perspective*, 8 ECOLOGY L. Q. 409 (1979-1980).

[59] United States v. Riverside Bayview Homes, Inc., 474 U.S. 121 (1985).

[60] *See Riverside Bayview*, 474 U.S. at 137 ("Although we are chary of attributing significance to Congress' failure to act, a refusal by Congress to overrule an agency's construction of legislation is at least some evidence of the reasonableness of that construction, particularly where the administrative construction has been brought to Congress' attention through legislation specifically designed to supplant it."); *see also* Minnehaha Creek Watershed Dist. v. Hoffman, 597 F. 2d 617, 626 (8th Cir. 1979) (relying on 1977 legislative history to determine regulatory scope of Section 404 as originally passed).

Those 1977 Congressional debates indeed saw legislators affirm a broad approach to jurisdiction. The Senate Environment and Public Works Committee made clear that "[t]he committee amendment is designed to reaffirm this intent and dispel the widespread fears that the program is regulating activities that were not intended to be regulated."[61] As part of the debate, Senator Howard Baker of Tennessee explained the common scientific understanding of hydrological linkage between all types of waters by noting that

> [i]t is important to understand that toxic substances threaten the aquatic environment when discharged into small streams or into major waterways. Similarly, pollutants are available to degrade water and attendant biota when discharged in marshes and swamps, both below and above the mean and ordinary high water marks. . . . Continuation of the comprehensive coverage of this program is essential for the protection for the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire

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[61] S. Rep. No. 95-370, 95th Cong., 1st Sess. (1977), at 74-75. During the Senate's floor debate on the 1977 amendments, Senator Lloyd Bentsen of Texas offered an amendment to the Environment and Public Works Committee's bill that would have amended the Act to limit the scope of Section 404 to only traditionally navigable waters and their adjacent wetlands. Opponents of Senator Bentsen's amendment provided detailed analysis as to why Senator Bentsen's amendment to reduce jurisdiction of the Act should be rejected. For example, Senator Gary Hart of Colorado spoke at length on the shortcomings of the approach advocated by Senator Bentsen: "The Congress can capitulate. The Congress can abandon the national interest. The Congress can permit activities of a dredge-and-fill nature to go forward on those small streams, marshes, wetlands, and swamps which will make their way into the bigger waterways of this country and have a tremendous adverse effect on the people of this country and on their welfare, on their crops, on many of their activities. Or we can establish a program of the sort the committee has established, which will protect all of those water systems; which will protect all of the elements of those systems, which will not permit dredge and fill activities to deposit very toxic materials into those waterways." 123 Cong. Rec. 26,713 (Aug. 4, 1977). Likewise, Senator John H. Chafee of Rhode Island spoke about the value of wetlands for the whole country in arguing for defeat of Senator Bentsen's proposal by noting that "I think it is important to bear in mind that marshes and wetlands are not a parochial responsibility or an asset; they are not a local asset; they are a national asset. They are not just confined within boundaries which happen to exist for any one of our States. The wetlands perform a vital part of the food chain for our wildlife. . . . We have to remember that it affects everything else downstream. There is a linkage between wetlands and streams and estuaries and rivers, and they all must live in harmony, through wise management." 123 Cong. Rec. 26,716-17 (Aug. 4, 1977). These comments and others like them as part of a long debate held before the full Senate resulted in a vote where broad jurisdiction was affirmed causing Senator Bentsen himself to state: "The committee has failed to recommend any reduction in the scope of the § 404 permit program. . . . The program would still cover all waters of the United States, including small streams, ponds, isolated marshes, and intermittently flowing gullies." 123 Cong. Rec. 26,711 (Aug. 4, 1977). In supporting this amendment, Senator John Tower of Texas referred to *Callaway*, 392 F. Supp. at 686 and noted "[a] court decision, coupled with an administrative decision, is causing us to be faced with a regulatory scheme which covers not just the rivers of the Nation but all surface waters and wetlands of the United States." 123 Cong. Rec. 26,721-22 (Aug. 4, 1977).

resource.[62]

Yet despite these Congressional attempts to clarify the matter, federal jurisdiction was challenged again in subsequent years.[63] The first time the United States Supreme Court agreed to weigh in on the jurisdiction issue was in *United States v. Riverside Bayview Homes*.[64] For a unanimous court in 1985, Justice White wrote "[i]n view of the breadth of federal regulatory authority contemplated by the Act itself and the inherent difficulties of defining precise bounds to regulable waters, the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act."[65]

But the controversy over jurisdiction did not end there. In fact, the unanimous court decision led the Corps (and EPA) to reconsider the breadth of appropriate federal regulatory reach and issue slightly revised regulations with preamble language that came to be known as the "Migratory Bird Rule."[66] Upheld by many Circuit courts through multiple challenges,[67] this Corps and EPA interpretation was ultimately ruled a bit too broad by a sharply-divided 5-4 Supreme Court in *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* [*SWANCC*].[68] That decision lead to great confusion, delay and speculation that the permitting program would fall apart.[69] It did not. In fact, most subsequent interpretations of the breadth of the *SWANCC* decision found it to be very narrow.[70]

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[62] 123 Cong. Rec. 26,718 (Aug. 4, 1977). Congressional debate on the value of wetlands when determining the scope of its jurisdiction with respect to an earlier enactment is entitled "persuasive value" because "[h]ere we have Congress at its most authoritative, adding complex and sophisticated amendments to an already complex and sophisticated act. Congress is not merely expressing an opinion . . . but is acting on what it understands its own prior acts to mean." Bell v. New Jersey, 461 U.S. 773, 784-785 & n.12 (1983) (quoting Mount Sinai Hosp. v. Weinberger, 517 F.2d 329, 343 (5th Cir. 1975)).

[63] *See, e.g.*, Leslie Salt Co. v. U.S., 896 F.2d 354 (1990), *cert. denied*, 498 U.S. 1126 (1991)(upheld the Migratory Bird Rule); Hoffman Homes v. EPA, 999 F.2d 256 (7th Cir. 1993) (likewise upheld the rule); Tabb Lakes v. U.S., 715 F. Supp. 726 (E.D. Va. 1988), *aff'd without opinion*, 885 F.2d 866 (4th Cir. 1989) (Migratory Bird Rule held invalid in the Fourth Cir. in 1989 for failure to follow the Administrative Procedure Act required notice and comment procedures); U.S. v. Wilson, 133 F. 3d 251 (4th Cir. 1997).

[64] 474 U.S. at 135.

[65] *Id.* at 134.

[66] Final Rule for Regulatory Programs of the Corps of Engineers, 51 Fed. Reg. 41,217 (1986) (codified at 33 C.F.R. §§ 320-330); Clean Water Act Section 404 Program Definitions and Permit Exemptions; Section 404 State Program Regulations, 53 Fed. Reg. 20,765 (1988) (codified at 40 C.F.R. §§ 232-233).

[67] *See, e.g.*, Leslie Salt Co. v. United States, 896 F.2d 354 (1990), *cert. denied*, 498 U.S. 1126 (1991), Hoffman Homes v. EPA, 999 F.2d 256 (7th Cir. 1993). *See also* Dennis J. Priolo, *Section 404 of the Clean Water Act: The Case for Expansion of Federal Jurisdiction Over Isolated Wetlands*, 30 LAND & WATER L. REV. 91 (1995).

[68] 531 U.S. 159, 174 (2001).

[69] For a scholarly examination of these issues from differing perspectives, see Lance D. Wood, *Don't be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands*, 34 ENVT'L L. REP. 10187 (Feb. 2004); Virginia Albrecht and Stephen Nickelsburg, *Could SWANCC Be Right? A New Look At the Legislative History of the Clean Water Act*, 32 ENVT'L L. REP. (Sept. 2002).

[70] *See, e.g.*, Save Our Sonoran, Inc. v. Flowers, 408 F.3d 1113 (9th Cir. 2005); Treacy v. Newdunn Assocs. LLP, 344 F.3d 407 (4th Cir. 2003); United States v. Deaton, 332 F.3d 698 (4th Cir. 2003), *cert.*

Yet when two Sixth Circuit opinions interpreting SWANCC were accepted for review by the Supreme Court,[71] some expected a more definitive direction for the program from the Court. However, the fractured *Rapanos* opinion, with its plurality, two concurrences, and two dissents, has led to even less certainty.[72]

Justice Scalia's plurality, relying on a 1954 edition of Webster's New International Dictionary definition of "waters,"[73] called for a significant narrowing of Clean Water Act jurisdiction.[74] By contrast, Justice Stevens and three other justices in dissent would have upheld the lower court jurisdictional findings and deferred to the agency interpretations as reflecting Congressional intent.[75] The swing vote was Justice Kennedy, who agreed with the plurality as to the remand decision but disagreed vehemently as to its reasoning.[76] He would find jurisdiction supported only where there is a "significant nexus between the wetlands in question and navigable waters in the traditional sense...assessed in terms of the statute's goals and purposes."[77] Justice Kennedy's significant nexus can be found "if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.'"[78]

Judicial response to the *Rapanos* decision has been mixed. In the Ninth[79] and Seventh[80] Circuits, analyses have been based on Justice Kennedy's test.[81] Yet the First Circuit expressed some doubts about these other circuits' approaches.[82] Then a later Ninth Circuit analysis struggled to apply the various *Rapanos* jurisdictional tests to an isolated salt-processing pond.[83] Likewise, the Connecticut District Court seemed misguided in its attempt to apply *Rapanos* to pollution regulation at a shooting range bordering on wetlands.[84] So the judicial branch appears to be in need of more guidance.

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denied, 541 U.S. 972 (2004); Cmty. Ass'n for Restoration of Env't v. Henry Bosma Dairy, 305 F.3d 943 (9th Cir. 2002); Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526 (9th Cir. 2001). *But see In re* Needham, 354 F.3d 340 (5th Cir. 2003); Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001).

[71] United States v. Rapanos, 376 F.3d 629 (6th Cir. 2004), and Carabell v. U.S. Army Corps of Engineers, 391 F.3d 704 (6th Cir. 2004).

[72] *See* STEPHEN M. JOHNSON, KIM DIANA CONNOLLY, & MARK A. RYAN, SUPPLEMENTS TO THE CLEAN WATER HANDBOOK, SECOND EDITION AND WETLANDS: LAW AND POLICY: UNDERSTANDING SECTION 404 (Jan. 2007), *2006 Developments in the Corps Nationwide Permit Program, available at* http://www.abanet.org/abastore/front_end/static/nosearch/watersuppp001-017.pdf (last visited Feb. 9, 2007).

[73] 126 S.Ct. at 2255

[74] *Id.* at 2221.

[75] *Id.* at 2264 (J. Stevens dissenting).

[76] *Id.* at 2246 ("the plurality's opinion is inconsistent with the Act's text, structure, and purpose.").

[77] *Id.* at 2248.

[78] *Id.*

[79] Northern California River Watch v. City of Healdsburg, 457 F.3d 1023 (9th Cir., 2006).

[80] United States v. Gerke Excavating, Inc., 464 F.3d 723 (7th Cir., 2006).

[81] See, e.g., *Gerke*, 464 F.3d at 725 ("...as a practical matter the Kennedy concurrence is the least common denominator (always, when his view favors federal authority).")

[82] United States v. Johnson, 467 F.3d 56 (1st Cir. 2006) ("Curiously, without explanation, the [*Gerke*] court equates the 'narrowest opinion' with the one least restrictive of federal authority to regulate." *Id.* at 61.).

[83] San Francisco Baykeeper v. Cargill Salt Div., 2007 U.S. App. LEXIS 5442 (9th Cir. 2007).

[84] Simsbury-Avon Pres. Soc'y, LLC v. Metacon Gun Club, Inc., 2007 U.S. Dist. LEXIS 7177 (D.

The agencies, meanwhile, are mired in some sort of executive quagmire[85] and have been delayed in issuing promised guidance.[86] Of course, anticipated SWANCC "guidance"[87] took almost two years to produce[88] and was considered by many to be less than guiding.[89] In addition to the promised guidance, some representatives of the development community have joined those Justices who called for a rulemaking[90] by agitating for new regulations in the wake of *Rapanos*.[91]

However, the lack of guidance doesn't stop the need for the Corps (and EPA) to implement the program on a daily basis, which leads to the discussion in the following section of this essay about Section 404 permitting program implementation.[92] Moreover, the confusion surrounding the reach of the jurisdictional scope of the Section 404 program is far from the only area of controversy surrounding the day-to-day permitting operations of Corps staff. Disagreement and debate also surround which activities the Corps can regulate,[93] the mitigation it can require,[94] the general permitting program under

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Conn. 2007) The *Metacon* court reaches summary judgment and finds no jurisdiction by applying the significant nexus test to wetlands demonstrated to be adjacent to traditional navigable waters. *Id.* at *27-29. However, Justice Kennedy's concurrence specifically states "[a]s applied to wetlands adjacent to navigable-in-fact waters, the Corps' conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone." *Rapanos*, 126 S. Ct. at 2248.

[85] Amena H. Saiyid, *Guidance Expected to Clarify Jurisdiction Of Federal Agencies in Wake of Court Rulings*, BNA DAILY ENV'T, Jan. 17, 2007 at B6 ("The Environmental Protection Agency and the U.S. Army Corps of Engineers intend to mark the new year with joint guidance to clarify federal jurisdiction over wetlands...").

[86] Memorandum from Mark F. Sudol, *Interim Guidance on the Rapanos and Carabell Supreme Court Decision* (July 5, 2006), available at http://www.craig-environmental-law.com/forms/ArmyCorpsReactiontoRapanos.pdf (last visited Feb. 9, 2007) ("As you know, on June 19th the Supreme Court issued a decision in the consolidated wetlands cases. OGC, OECA, and OW are studying the opinions and do not yet have an Agency position on them. In the very near future, we intend to issue guidance on how the Agency should proceed in light of the decision." *Id.* at 3.).

[87] Following issuance of a "legal interpretation", Gary S. Guzy, EPA, Robert M. Andersen, Corps, *Supreme Court Ruling Concerning CWA Jurisdiction over Isolated Waters*, Jan. 19, 2001, *available at* http://www.aswm.org/fwp/swancc/legal.pdf (last visited Feb. 9, 2007), almost two years passed before a formal response was produced following SWANCC. *See* Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," Appendix A, Joint Memorandum, 68 Fed. Reg. 1995 (Jan. 15, 2003).

[88] *Joint Memorandum, supra* note 87.

[89] *See* Susan Bruninga, *EPA, Corps Guidance Could Be Modified as Part of Bigger Effort to Improve Program*, BNA DAILY ENV'T, Apr. 29, 2004 at A6 ("The guidance issued in 2003 has been criticized by environmental advocates who say it does not provide enough protections to isolated wetlands and that up to 20 million acres of wetlands could be at risk. Industry groups said the guidance does not do enough to clarify which wetlands are covered by the Clean Water Act, especially after recent conflicting court decisions on jurisdictional issues.").

[90] 126 S.Ct. 2249; *id.* at 2266 (J. Breyer, dissenting); *id.* at 2236 (J. Roberts, concurring).

[91] Pacific Legal Foundation, PLF Petitions for New Clean Water Act Regulations, http://rapanos.typepad.com/my_weblog/2006/09/plf_petitions_f.html (last visited Feb. 9, 2007) ("Becasue [sic] the Administration has yet to propose new regulations implementing the *Rapanos* decision, Pacific Legal Foundation has submitted its own regulations to the Corps and EPA for action.").

[92] *See infra* Section III.

[93] *See supra* note 25.

[94] *See generally* KIM DIANA CONNOLLY, STEPHEN M. JOHNSON & DOUGLAS R. WILLIAMS, WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404, CH. 8, *Mitigation* (2005). *See also* "Compensatory Mitigation for Losses of Aquatic Resources," 71 Fed. Reg. 29604 (May 23, 2006).

404(e)[95]... the list could go on. Suffice it to say that those on the front lines of processing permit applications have, for decades, operated without the clarity they deserve.[96] Nevertheless, permits are applied for and must be processed; thus, the magic meets the mundane in the quest to protect the waters of the land.

II. THE DAY-TO-DAY IMPLEMENTATION OF SECTION 404 OF THE CLEAN WATER ACT

The Corps, charged with the day-to-day implementation of the programs to protect the nation's waters,[97] has attempted to "balance" the interests of all those in the wetlands world.[98] The Corps regulatory program's entrance to its webpage phrases its balancing act the following way: "[w]orking to provide strong protection of the Nation's aquatic environment, efficient administration of the Corps' regulatory program, and fair and reasonable decision-making for the regulated public."[99]

Balancing is not an easy task, given the strong beliefs on both sides. However, the Corps' structure and the overall agency's basic mission make this task even more difficult. One of the oldest regulatory programs of the federal government,[100] the Corps' regulatory offices are deliberately decentralized.[101] With thirty-eight districts nationally and over 1200 staff, most decisions are made on the ground by program staff.[102] There is limited headquarters-level guidance.[103]

Nevertheless, under its Clean Water Act Section 404 permitting program,[104] the

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[95] STEPHEN M. JOHNSON, KIM DIANA CONNOLLY & MARK A. RYAN, SUPPLEMENTS TO THE CLEAN WATER HANDBOOK, SECOND EDITION AND WETLANDS: LAW AND POLICY: UNDERSTANDING SECTION 404 (Jan. 2007), *2006 Developments in the Corps Nationwide Permit Program*, *available at* http://www.abanet.org/abastore/front_end/static/nosearch/watersuppp001-017.pdf (last visited Feb. 9, 2007).

[96] As I mentioned in an earlier footnote, I have gotten to hear the experiences of Corps employees on at least an annual basis since 1998. *See supra* note 11.

[97] 33 CFR pt. 320 (2006).

[98] *See* ExpectMore.gov, *Detailed Information on the Corps of Engineers: Regulatory Program Assessment*, *available at* http://www.whitehouse.gov/OMB/expectmore/detail.10001130.2005.html (last visited Feb. 9, 2007) ("The purpose of the program is to protect, maintain and restore the nation's aquatic resources in a way that enhances and balances environmental and economic development values and objectives. The program does this by means of regulations and related measures.").

[99] U.S. Army Corps of Engineers, *Regulatory Program, Overview*, *available at* http://www.usacc.army.mil/cw/cecwo/reg/ (last visited Feb. 9, 2007).

[100] *Id. See also supra* notes 4-10 and accompanying text.

[101] "The Corps is a highly decentralized organization. Most of the authority for administering the regulatory program has been delegated to the thirty-six district engineers and eleven division engineers." 33 C.F.R. § 320.1(a)(2) (2006).

[102] As the Corps own website explains, "[i]n the U.S. the Corps is divided into eight regional divisions. Each division is further divided in to subordinate districts. Division and district boundaries, for the most part, are determined by watersheds. The districts are the operational level of the Corps, seeing to the day-to-day activities in all of the missions areas." U.S. Army Corps of Engineers, *Where We Are*, http://www.usace.army.mil/howdoi/where.html#State (last visited Feb. 9, 2007).

[103] This is not surprising, given the low number of people who actually work in the Headquarters Regulatory office. *See supra* note 101.

[104] *See generally* U.S. Army Corps of Engineers, *Regulatory Program Value to the Nation: Keeping Waters Clean and Clear*, *available at* http://www.iwr.usace.army.mil/docs/RegulatoryProgram.pdf (last visited Feb. 9, 2007).

Corps is charged with issuing two types of permits:[105] standard (sometimes called individual) permits[106] and general permits.[107] Although, percentage-wise, standard permits only represent about five percent of the total permitting actions undertaken by the Corps, they embody the largest component in terms of resources of the Corps' day-to-day regulatory program operations.[108]

The standard permit process can be conceptually broken into four phases:[109] (1) The pre-application/application phase, in which a project is identified and the organization undertaking it develops and submits an application with as-needed input from Corps staff on application and review requirements;[110] (2) the public notice and comment phase, through which the Corps solicits the views of a variety of individuals, agencies and organizations;[111] (3) the evaluation, decision and mitigation phase, when the Corps evaluates the application and the public comments and seeks to balance various factors, minimize the impact of projects on the environment, and coordinate with several federal, state and tribal agencies;[112] and (4) the monitoring and enforcement phase, where the Corps monitors projects to ensure that the permit's conditions are met. [113]

The Corps is called upon to process a massive number of permit applications[114] each year for proposed impacts on aquatic resources such as wetlands. Corps personnel review close to ninety thousand permit applications per year.[115] The vast majority of these permit applications proceed in an expedited manner that does not involve a detailed review.[116] Nevertheless, the Corps must have jurisdiction over all activities for which it requires a permit. The process of determining whether a permit is required thus involves a jurisdictional determination to identify whether a particular piece of land contains jurisdictional waters of the United States.[117]

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[105] *See generally* U.S. Army Corps of Engineers Memphis District, *The Regulatory Permit Program – A Brief Guide from the Memphis District, available at* http://www.mvm.usace.army.mil/regulatory/Permit/permit.htm (last visited Feb. 9, 2007) ("This brochure discusses the regulatory program of the U.S. Army Corps of Engineers: what it is, how it began, how it may affect you, and what you as a concerned American can do to help.").

[106] For a detailed overview of this process, *see* KIM DIANA CONNOLLY, STEPHEN M. JOHNSON & DOUGLAS R. WILLIAMS, WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404, CH. 6, *Individual Permits* (2005).

[107] For a detailed overview of this process, *see id.* CH. 5, *General and Nationwide Permits.*

[108] This is because standard permits "require public notice, opportunity for public hearing, an analysis of project alternatives, and completion of an Environmental Assessment." U.S. Army Corps of Engineers, *Regulatory Program, All Permit Decisions FY2002, available at* http://www.usace.army.mil/cw/cecwo/reg/2002webcharts.pdf (last visited Feb. 9, 2007).

[109] *See generally* U.S. Army Corps of Engineers, *Regulatory Permit Process, available at* http://www.vtn.iwr.usace.army.mil/regulatory/regpermit.htm (last visited Feb. 9, 2007). *See also* WILLIAM L. WANT, LAW OF WETLANDS REGULATION, Ch. 6, *The Permit Process* (West, 2006).

[110] *See Regulatory Permit Process, supra* note 109.

[111] *Id.*

[112] *Id.*

[113] *Id.*

[114] The standard permit application can be found on-line. Application for Department of the Army Permit, OMB Approval No. 0710-0003, *available at* http://www.usace.army.mil/cw/cecwo/reg/eng4345a.pdf (last visited Feb. 9, 2007).

[115] *See* U.S. Army Corps of Engineers, *US Army Corps of Engineers Regulatory Program*, (2003), http://www.usace.army.mil/inet/functions/cw/cecwo/reg/2003webcharts.pdf (last visited Feb. 9, 2007).

[116] Most permits processed by the U.S. Army Corps of Engineers are those issued pursuant to 404(e), 33 U.S.C. § 1344(e). *US Army Corps of Engineers Regulatory Program, supra* note 115, at 1 (showing that in FY 2003, 78,803 permits proceeded as nationwide or regional general permits).

The *Rapanos* decision has left the process of making such jurisdictional calls in serious disarray. As discussed above, many months past their self-imposed deadline[118] the Corps has yet to provide its district offices (and other stakeholders) with guidance as to how to proceed.[119] Corps districts have put jurisdictional determinations on hold.[120] And the waiting continues.

Ultimately, however, the processing of Corps permits still requires a case-by-case analysis.[121] This latest wrinkle in the *Rapanos* decision makes the requisite analysis a little more convoluted and almost certainly adds some time to the decision process, but not much has changed on a larger level. We are thus stuck in the middle of the story, with no ending (happy or otherwise) in immediate sight.

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[117] U.S. Army Corps of Engineers Wilmington District, Jurisdictional Determinations, http://www.saw.usace.army.mil/WETLANDS/JDs/index.html (last visited Feb. 9. 2007) ("A jurisdictional determination (JD) is the process of identifying and locating jurisdictional Waters of the United States (including wetlands) regulated by the U.S. Army Corps of Engineers (COE) under Section 404 of the Clean Water Act. The method of performing a JD employs a multi-parameter approach defined in Technical Report Y-87-1, Corps of Engineers Wetlands Delineation Manual, dated January 1987, and supplemental guidance. It requires positive evidence of hyrophytic vegetation, hydric soils, and wetlands hydrology for a determination that an area is a wetland." *Id.*) *See also* Environmental Laboratory, U.S. Dept. of the Army, Corps of Engineers, *Wetlands Delineation Manual* (1987), *available at* http://www.saw.usace.army.mil/WETLANDS/Policies/delin_man87.pdf (last visited Feb. 9, 2007).

[118] The initial communication from the regulating agencies regarding the case was issued in July 2006, and promised substantive guidance in "the next few weeks." *See* Memorandum from Mark Sudol, *supra* note 86, at 2.

[119] When it will be out is anybody's guess. *See* Endangered Species and Wetlands Report, Dec. 5, 2006, http://www.eswr.com/latest/ (last visited Feb. 9, 2007). ("The latest on the grapevine is that it is supposed to be out 'soon,' but who knows what that means? Persons with second-hand knowledge of the actual document agreed upon by EPA and the Army Corps of Engineers say that it casts a wider jurisdictional net than the development community would like. But the guidance has been at CEQ for a couple of months now, and the mid-term election, which was thought to be holding it up, is long over.")

[120] *See, e.g.*, U.S. Army Corps of Engineers, Baltimore District, *Jurisdictional Determinations*, http://www.nab.usace.army.mil/Regulatory/JD.htm (last visited Feb. 9, 2007) ("In the wake of the Supreme Court decisions in United States v. Rapanos and United States v. Carabell, the U.S. Army Corps of Engineers and the Environmental Protection Agency are examining the methods in which we describe and document jurisdictional determinations (JDs) pursuant to the Clean Water Act (CWA). ... In order to allow the Corps and EPA to prepare and issue substantive guidance, the Baltimore District is, in accordance with guidance from our Headquarters, delaying making CWA jurisdictional determinations for areas beyond the limits of traditional navigable waters (Section 10 waters) until new guidance is issued."). *See also* U.S. Army Corps of Engineers Wilmington District, *Regulatory Division*, http://www.saw.usace.army.mil/wetlands/ (last visited Feb. 9, 2007) ("In light of the pending release of formal guidance on this issue, when there are these types of waters present on a site, the Wilmington District will not issue a Final JD until the final or additional interim guidance is issued by headquarters.").

[121] For an interesting discussion of the agency role in jurisdictional calls post-SWANCC, see Robert R.M. Verchick, *Toward Normative Rules for Agency Interpretation: Defining Jurisdiction Under the Clean Water Act*, 55 ALA. L. REV. 845 (2004) ("Under the model, agencies should act in ways that respect policies from all three governmental branches but that primarily favors congressional intent, as expressed by a statute's language, structure, and legislative history. Agencies, particularly those charged with environmental enforcement, also owe substantial deference to the teachings of their scientific and other professional expertise, with the understanding that public debate is essential where non-scientific values are at stake. Finally, agencies owe a strong obligation to prefer active, robust, and effective enforcement strategies." *Id.* at 881).

CONCLUSION – HOW WE GET TO "HAPPILY EVER AFTER" FOR SECTION 404 PERMITTING LAW?

As we come to the end of my musings on the "tale" underlying the issues at play following the *Rapanos* case, the question to ponder is deceptively simple. Is there a way to get to "happily ever after"[122] in the Clean Water Act jurisdiction debate, and/or in other parts of Section 404 permitting?

The answer "no" is certainly defensible. The controversial history of the Section 404 permitting program,[123] as well as a cursory examination of the current situation, easily could lead to the conclusion that the stakeholders have become so divided and the battles so embittered that no functional zone of potential agreement[124] exists.[125]

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[122] For me, "happily ever after" would be a workable program that provides appropriate protection to the resources Congress indicated intent to protect through the Clean Water Act. See supra notes 45-62 and accompanying text. I acknowledge that others may have an entirely different version of a happy ending.

[123] *See, e.g.*, Joan M. Ferretti, *Restoring the Nation's Wetlands: Can the Clean Water Act's Dredge And Fill Guidelines Do the Job?*, 1 PACE ENVTL L. REV. 105 (1983); Bruce D. Ray, *Section 404 of the Clean Water Act: An EPA Perspective*, 2 NAT. RESOURCES & ENV'T 20 (1986-1987); James T. B. Tripp, *Public Input in the Permitting Process: The Section 404 Example*, 2 NAT. RESOURCES & ENV'T 23 (1986-1987); Bhavani Prasad V. Nerikar, T*his Wetland Is Your Land, This Wetland Is My Land: Section 404 of the Clean Water Act and Its Impact on the Private Development of Wetlands*, 4 ADMIN. L.J. 197 (1990-1991); Simeon D. Rapoport, *The Taking of Wetlands Under Section 404 of the Clean Water Act*, 17 ENVTL. L. 111 (1986-1987).

[124] In traditional negotiation parlance, the "zone of potential agreement" is the overlapping areas where all sides will accept a decision. ROY J. LEWICKI, JOHN MINTON & DAVID SAUNDERS, *Zone of Potential Agreement*, NEGOTIATION (Irwin-McGraw Hill, 3d ed. 1999); MICHAEL WATKIN, SUSAN ROSEGRANT & SHIMON PERES, *BATNAs and ZOPA* in BREAKTHROUGH INTERNATIONAL NEGOTIATION: HOW GREAT NEGOTIATORS TRANSFORMED THE WORLD'S TOUGHEST POST-COLD WAR CONFLICTS 26-35 (Jossey-Bass Publishers, 2001).

[125] This is certainly in keeping with the conclusions of esteemed scholars on the subject over the years. *See, e.g.* Alyson C. Flournoy, *Section 404 at Thirty-Something: A Program in Search of a Policy*, 55 ALA. L. REV. 607, 608 (2004). ("Over the years, both governmental and non-governmental reports have highlighted the persistent gaps in knowledge, enforcement, monitoring, funding, and interagency coordination under section 404, and the attendant disappointing results. ... A review of the section 404 program's evolution under successive administrations reveals a program (and agency) perpetually in flux with a poorly-defined goal. A broad look at section 404's first thirty years highlights important tensions that have beset the section 404 program from its inception."); Hope Babcock, *Federal Wetlands Regulatory Policy: Up to Its Ears in Alligators*, 8 PACE ENVTL. L. REV. 307 (1991) ("An examination of the federal wetlands permitting program reveals significant problems. These problems, combined with ingrained attitudes about the sanctity of private property, lack of public appreciation of wetland values, and insufficient political will to protect them, make it easy to see why wetlands continue to disappear and why the federal wetlands regulatory program is one of the most controversial of the country's environmental programs" *Id.* at 307-308.); Michael C. Blumm & D. Bernard Zaleha, *Federal Wetlands Protection Under the Clean Water Act: Regulatory Ambivalence, Intergovernmental Tension, and a Call for Reform*, 60 U. COLO. L. REV. 695 (1989); Oliver A. Houck, *Hard Choices: The Analysis of Alternatives Under Section 404 of the Clean Water Act and Similar Environmental Laws*, 60 U. COLO. L. REV. 773 (1989) (declaring that Section 404 of the Clean Water Act "lies like an open wound across the body of environmental law, one of the simplest statutes to describe and one of the most painful to apply." *Id.*)

But that is the easy answer, and certainly inappropriate for a fairy tale-based consideration. So what version of "Bibbity Bobbity Boo" can we invoke to protect wetlands and other waters while allowing some reasonable amount of land use?

Magic words could theoretically come from the administrative, judicial or legislative branch. But the administrative branch is limited to activities granted by statutory authority,[126] and the judicial branch is charged with interpreting, not making laws.[127] The difficulties these two branches have encountered with the jurisdictional issue alone since the original delivery of the wording in Clean Water Act Section 404[128] make it clear that the original spell did not work.

In other words, it seems to be precisely some new magic words from Congress that are needed to rectify this situation.[129] In the parlance of this essay, thus, the rulers of the land will have to revisit and reaffirm their original directive on protecting the nation's waters. Predictions on whether that will be able to happen will, of course, be mixed. But the 110th Congress, with its new political make-up,[130] may offer some hope for passage of clarifying language.

Something like the Clean Water Authority Restoration Act,[131] which would redefine "waters of the United States" using the long-standing regulatory language[132] as "all waters subject to the ebb and flow of the tide, the territorial seas, and all interstate and intrastate waters and their tributaries, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and all impoundments of the foregoing, to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution."[133] would be a definite step in the right direction, especially with respect to the jurisdictional matter. The findings section contains what is likely to be sufficient bases for defensibility as to requisite commerce connections, though that will undoubtedly be a fight at some point.[134] But that approach may be too narrow in terms of the resource as a whole.

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[126] U.S. Const. art II, § 3 ("...shall take care that the laws be faithfully executed...").

[127] U.S. Const. art III.

[128] *See supra* Section II.

[129] This is not a new idea. For example, Judge Stanley Harris in the American Mining Congress case noted that "[t]he appropriate remedy for what the agencies now perceive to be an imperfect statute, however, is Congressional action; defendants' authority is limited to adopting regulations that effect the will of Congress as expressed in the statute." Am. Mining Cong. v. U.S. Army Corps of Eng'rs, 951 F. Supp. 267, 278 (1997), *aff'd*, Nat'l Mining Assoc. v. Army Corps of Eng'rs, 145 F.3d 1399 (D.C. Cir. 1998). *See also* Vickie V. Sutton, *Wetlands Protection - A Goal Without a Statute*, 7 S.C. ENVTL. L.J. 179, 207 (1998).

[130] In January 2007, the 110th Congress was sworn in with a Democratic majority in both the U.S. House of Representatives and U.S. Senate. Jonathan Weisman & Shailagh Murray, *Democrats Take Control on Hill*, WASH. POST, Jan 5, 2007 at A01, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/01/04/AR2007010400802.html (last visited Feb. 9, 2007).

[131] S. 912, 109th Cong., 1st Sess (2005); H.R. 1356, 109th Cong., 1st Sess. (2005). Nat'l Res. Defense Council, *Restoring America's Clean Water Legacy: The 110th Congress Must Pass Legislation to Restore the Scope of the Clean Water Act*, *available at* http://www.nrdc.org/legislation/factsheets/leg_07020201A.pdf (last visited Mar. 15, 2007) ("To restore the traditional scope of protection intended by Congress and to achieve the goal of restoring and maintaining the chemical, physical, and biological integrity of the nation's waters, legislation must: Define protected 'waters of the United States' based on the decades-old definition in Corps and EPA regulations; Delete the word 'navigable' from the Act to clarify that the Clean Water Act is principally intended to protect the nation's waters from pollution, and not just maintain navigability; Explain the basis for Congress's assertion of constitutional authority over the nation's waters, as defined in the Act, including smaller water bodies and so-called 'isolated' waters." *Id.*)

[132] *See supra* note 54.

The climate change debate[135] may provide a larger opportunity to address the waters of the United States issue in Congress. As the United Nations-sanctioned report recently concluded, global warming is a serious problem.[136] Like other environmental treasures, wetlands are seriously endangered by the changing climate.[137] Thus as legislative approaches to global warming move forward,[138] including clarification of the protections Congress wishes to be afforded to wetlands and other waters of the United States (or even just a clarification of the definition of waters of the United States) could be a logical part of the mix.[139]

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[133] *Id.* § 4. *Cf.* a competing proposal pending before the last Congress, the Federal Wetlands Jurisdiction Act, H.R. 2658, 109th Cong., 1st Sess (2005).

[134] The Commerce Clause of the U.S. Constitution limits federal authority. U.S. Const. art. I, 8, cl. 3. Both *Carabell* and *Rapanos* petitioners raised commerce clause issues in their questions presented, *see* http://www.supremecourtus.gov/qp/04-01384qp.pdf (last visited Feb. 9, 2007) (*Carabell*) and http://www.supremecourtus.gov/qp/04-01384qp.pdf (last visited Feb. 9, 2007) (*Rapanos*). Because the Supreme Court has yet to address this matter in the Clean Water Act context, the Commerce Clause will likely remain an issue for any legislation proposing jurisdictional breadth beyond traditional navigability for protection of the nation's waters. *See, e.g.,* Kenneth L. Rosenbaum, *The Supreme Court Endorses A Broad Reading of Corps Wetlands Jurisdiction Under FWPCA 404*, 16 Envtl. L. Rep. 10008 (1986); John A. Leman, *The Birds: Regulation of Isolated Wetlands and the Limits of the Commerce Clause*, 28 U.C. Davis L. Rev. 1237 (1995); J. Blanding Holman, IV, *After United States v. Lopez: Can the Clean Water Act and the Endangered Species Act Survive Commerce Clause Attack?*, 15 Va. Envtl. L.J. 139, 142 (1995); Lori J. Warner, *The Potential Impact of United States v. Lopez on Environmental Regulation*, 7 Duke Envtl. L. & Pol'y F. 321, 326 (1997); Gregory T. Broderick, *From Migratory Birds to Migratory Molecules: The Continuing Battle Over the Scope of Federal Jurisdiction Under the Clean Water Act*, 30 Colum. J. Envtl. L. 473 (2005); Diane Summers Clarke, *It's Not Easy Being Green: The Constitutionality Of Implementing The Endangered Species Act Under The Commerce Clause,* 14 Southeastern Envtl. L.J. 297 (2006); Joshua L. Lee, *Federal Wetland Jurisdiction and the Power To Regulate Commerce: Searching for the Nexus in Gerke Excavating*, 2006 B.Y.U.L. Rev. 263 (2006).

[135] *See, e.g.*, An Inconvenient Truth, http://www.climatecrisis.net/ (last visited Feb. 9, 2007); U.S. Environmental Protection Agency, *Climate Change*, http://www.epa.gov/climatechange/ (last visited Feb. 9, 2007); Competitive Enterprise Institute, *Global Warming*, http://www.globalwarming.org/ (last visited Feb. 9, 2007), Union of Concerned Scientists, *Global Warming*, http://www.ucsusa.org/global_warming/ (last visited Feb. 9, 2007).

[136] Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis, Summary for Policy Makers*, *available at* http://www.ipcc.ch/SPM2feb07.pdf (last visited Feb. 9, 2007). *See generally* Intergovernmental Panel on Climate Change website at http://www.ipcc.ch/ (last visited Feb. 9, 2007).

[137] *See, e.g.* John Kusler & Virginia Burkett, *Climate Change in Wetland Areas Part I: Potential Wetland Impacts and Interactions*, Acclimations, Newsletter of the US National Assessment of the Potential Consequences of Climate Variability and Change (May- Jun. 1999); *available at* http://www.usgcrp.gov/usgcrp/Library/nationalassessment/newsletter/1999.06/wet.html (last visited Feb. 9, 2007); James G. Titus, *Greenhouse Effect And Coastal Wetland Policy: How Americans Could Abandon An Area The Size Of Massachusetts At Minimum Cost,* 15 Env't Mgmt. 39 (1991); James G. Titus, *Sea Level Rise and Wetland Loss: An Overview, U.S. Environmental Protection Agency*, (1988) http://yosemite.epa.gov/oar/globalwarming.nsf/UniqueKeyLookup/SHSU5BNQKX/$File/chap1.pdf (last visited Feb. 9, 2007).

[138] Speaker Nancy Pelosi, Press Releases, *Pelosi Statement on Energy Independence and Global Warming Agenda*, Mar. 14, 2007, *available at* http://speaker.house.gov/newsroom/pressreleases?id=0103 (last visited Mar. 15, 2007) ("Our Committees are already working hard on hearings and legislation designed to meet our June timetable for taking crucial legislative steps to achieve energy independence and

Federalism and reality have led many to call for strengthened state[140] and local approaches[141] to protect waters.[142] However, the non-federal responses post-*SWANCC* have been limited,[143] and the politics that hamper federal-level responses are just as potent, if not more so, on state and local levels.

At the end of the day, the jurisdictional definition of "waters of the United States" should be understood, as Congress intended,[144] to include not only traditional navigable waters and their tributaries, but also the wetlands whose functions support them. *Rapanos* seems to signal that it will take Congressional reaffirmation to get there.

Yet short of new magic words in the form of legislative clarification of CWA Sections 404 and 502, the battles will persist in courts, and the difficulties of

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reduce activities that contribute to global warming. The Leadership is continuing to work with all of these Committees to ensure that we will have legislation that addresses renewable energy and energy efficiency. We are going to take bold action throughout this Congress to reduce our dependence on foreign oil, stop global warming, and ensure that America is in the forefront in developing innovative technologies. These decisions are critical to our national security and to the creation of millions of jobs here in America.") *See* also Karoun Demirjian, *Global warming bills heat up in Congress*, CHI TRIB., Mar. 7, 2007, *available at* http://www.chicagotribune.com/news/nationworld/chi-070307climate,1,5259146.story?track=rss (last visited Mar. 15, 2007); Christina Bellantoni, *Congress tackles global warming*, WASH TIMES, Feb. 12, 2007, *available at* http://www.washtimes.com/national/20070212-122836-3530r.htm (last visited Mar. 15, 2007).

[139] The breadth of likely impacts to wetlands as a result of global warming go well beyond regulatory matters. *See* PEW OCEANS COMM'N, AMERICA'S LIVING OCEANS: CHARTING A COURSE FOR SEA CHANGE (2003) 83, *available at* http://www.pewtrusts.com/pdf/env_pew_oceans_final_report.pdf (last visited Feb. 9, 2007) ("scientists expect .... climate change will result ... serious, if not catastrophic, damage to some ecosystems. Important coastal and ocean habitats, including... coastal wetlands, estuaries, and mangrove forests will be particularly vulnerable to the effects of climate change. These systems are essential nurseries for commercial fisheries and support tourism and recreation."). It is thus important to acknowledge that the impact of climate change on all the nation's wetlands almost certainly cannot be addressed in the context of the Corps Regulatory Program, and that any relevant amendments to the Clean Water Act would only be a part of the solution.

[140] *See generally* Ass'n of State Wetland Managers, *State Wetland Programs*, http://aswm.org/swp/index.htm (last visited Feb. 9, 2007).

[141] *See* Kim Diana Connolly, *Looking to Local Law: Can Local Ordinances Help Protect Isolated Wetlands?* 27 NAT'L WETLANDS NEWSLETTER 21 (May-June 2005).

[142] Like many of the other matters discussed in this conclusion, such is not a new concept. *See, e.g.*, Hope Babcock, *Federal Wetlands Regulatory Policy: Up to Its Ears in Alligators*, 8 PACE ENVTL. L. REV. 307, 350 (1991).

[143] *See* Jeanne Christie, *Overview of State Efforts to Close the Gaps in Jurisdiction: Status and Trends in State Wetland Programs*, http://www.aswm.org/calendar/legal/christie.pdf (last visited Feb. 9. 2007).

[144] *See supra* notes 55-58 and accompanying text. *See also* Brief of The Honorable John D. Dingell, The Honorable John Conyers, Jr., The Honorable Robert F. Drinan, The Honorable Gary W. Hart, The Honorable Kenneth W. Hechler, The Honorable Charles McCurdy Mathias, Jr., The Honorable Paul N. McCloskey, Jr., The Honorable Charles B. Rangel, And The Honorable Richard Schultz Schweiker, As Amici Curiae In Support of The Respondent, 126 S.Ct. 2208 (2006) (Nos. 04-1034, 04-1384), Supreme Court of The United States, Jan. 13, 2006, *available at* http://www.eswr.com/1105/rapanos/rapamicongress.pdf (last visited Feb. 9, 2007).

administering this law will continue to plague the Corps and EPA. Thus there is room for hope, but certainly no guarantee, that there can be some sort of "happily ever after" for the Clean Water Act Section 404 program following *Rapanos*.

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ARTICLES

Survey Says: Army Corps No Scalian Despot

by Kim Diana Connolly

Editors' Summary: Justice Antonin Scalia and others have described the U.S. Army Corps of Engineers' (the Corps') administration of the CWA §404 permitting process as burdensome and inefficient. Empirical data gathered from the Corps, however, do not bear out this assessment. In this Article, Kim Diana Connolly evaluates data collected from Corps Customer Service Surveys as well as the apparent disconnect between applicant experiences and the public's negative perception of the permitting process. She begins the Article with an overview of the Corps' regulatory permitting process, then lays out the history of and context for the Corps' Customer Service Surveys. Next, she summarizes available responses from various districts and sets forth some concluding remarks and recommendations.

I. Introduction

Presented only with Justice Antonin Scalia's June 2006 plurality opinion in *Rapanos v. United States*,[1] someone unfamiliar with the U.S. Army Corps of Engineers (the Corps) permitting process[2] might expect a plethora of angry, unhappy permit applicants. Justice Scalia wrote in *Rapanos* that "[t]he burden of federal regulation on those who would deposit fill material in locations denominated 'waters of the United States' is not trivial. In deciding whether to grant or deny a permit, the [Corps] exercises the discretion of an enlightened despot. . . ."[3] Justice Scalia's explanation continued by pointing to reported high costs and delays[4] involved in obtaining permits under §404 of the Clean Water Act (CWA).[5]

Corps records demonstrate that this alleged level of permitting delays and burdens is inaccurate.[6] Nevertheless,

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[1] 126 S. Ct. 2208, 36 ELR 20116 (2006) (this case is consolidated with *Carabell v. Corps of Eng'rs*, No. 04-1384 (June 19, 2006)). *See generally* Robert Meltz & Claudia Copeland, *The Wetlands Coverage of the Clean Water Act Is Revisited by the Supreme Court:* Rapanos v. United States (Congressional Research Service, Sept. 12, 2006), *available at* http://www.cnie.org/NLE/CRSreports/06Oct/RL33263.pdf. For background materials on the cases, including the original *Carabell* permit application and associated documentation, as well as the *Rapanos* enforcement documents, see Kim Diana Connolly, *U.S. Supreme Court* Rapanos *and* Carabell *Wetlands Cases*, http://www.law.sc.edu/wetlands/rapanos-carabell (last visited Mar. 20, 2007).

[2] *See infra* Section II. *See generally* U.S. Army Corps of Engineers, *Regulatory Permit Process*, http://www.vtn.iwr.usace.army.mil/regulatory/regpermit.htm (last visited Mar. 20, 2007).

[3] 126 S. Ct. at 2214.

[4] *Id.*

> The average applicant for an individual permit spends 788 days and $271,596 in completing the process, and the average applicant for a nationwide permit spends 313 days and $28,915—not counting costs of mitigation or design changes. Sunding & Zilberman, *The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetland Permitting Process*, 42 NAT. RESOURCES J. 59, 74-76 (2002). "[O]ver $1.7 billion is spent each year by the private and public sectors obtaining wetlands permits." *Id.* at 81. These costs cannot be avoided, because the Clean Water Act "impose[s] criminal liability," as well as steep civil fines, "on a broad range of ordinary industrial and commercial activities." Hanousek v. United States, 528 U.S. 1102, 1103 (2000) (Thomas, J., dissenting from denial of certiorari). In this litigation, for example, for backfilling his own wet fields, Mr. Rapanos faced 63 months in prison and hundreds of thousands of dollars in criminal and civil fines. *See* United States v. Rapanos, 235 F.3d 256, 260, 31 ELR 20357 (6th Cir. 2000).

Id.

[5] 33 U.S.C. §1344, ELR STAT. FWPCA §404.

[6] For example, in fiscal year (FY) 2002, 88% of all permit actions were completed within 60 days, a serious difference from the 313 days asserted by the study cited in Justice Scalia's plurality. U.S. Army Corps of Engineers, *Civil Works Strategic Plan, Fiscal 2004—Fiscal Year 2009* (2004), *available at* http://www.usace.army.mil/cw/hot_topics/ht_2004/cw_strat.pdf. Even in the late 1990s these complaints are not supported by the data. As the Deputy Assistant Secretary of the Army for Civil Works noted in 1997:

> [I]n Fiscal Year (FY) 1997, over 68,000 landowners asked the Corps for a Section 404 permit to discharge dredged or fill material into the waters of the United States, including wetlands. Of those, 87 percent received authorization under a

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Justice Scalia's negative portrayal is consistent with oft-voiced complaints about the burdens involved in the Corps' permitting process. Critics of the Corps routinely portray the regulated community as extremely dissatisfied with what it perceives as an unnecessarily burdensome permitting process.[7] This high level of applicant discontent has been asserted for decades.[8]

Empirical data reveal the inaccuracy of this assertion. In fact, Customer Service Surveys filled out by permit applicants[9] after undertaking the process of securing a Corps permit[10] reveal that many are delighted with the process.[11] Though some applicants do express concern about the time the permit process requires, an impressive percentage of applicants give the Corps perfect marks in their overall ranking of the permitting experience.[12] Some applicants even go so far as to proclaim themselves "satisfied customer[s]."[13]

This Article explores the results of the Corps' Customer Service Surveys,[14] as well as the apparent disconnect between Justice Scalia's (and others') perceptions and the available nationwide data on applicants' views of the permitting process. Section II provides an overview of the Corps' regulatory permitting process. Section III lays out the history of and context for the Corps' Customer Service Surveys. Section IV summarizes available responses from various districts. Section V sets forth some concluding remarks and recommendations. An Appendix following the Article contains a table of available responses by district.

Contrary to Justice Scalia's rhetoric in *Rapanos*,[15] a number of the Corps' permit applicants have deemed the regulatory program to be "appropriate, sensible, and effective."[16] Indeed, many declare themselves to be satisfied customers,[17] and most are not deeply troubled by the alleged burdens of the permitting process.[18] As this Article explores, the disconnect between data and perception may signal larger issues within the Corps' permitting process and a need for some internal administrative examination and reform. Perhaps as importantly, however, the data may reveal a need to convey to the judiciary a more accurate picture of the Corps' permitting process in order to aid courts in their review of such agency actions.[19]

II. The Corps' Permitting Process

Corps staff members have been processing permits of some sort since the late 1800s.[20] Modern Corps employees[21] pro-

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general permit in an average time of 15 days. Less than 10 percent were subject to the more detailed individual permit evaluation, where the average time was 104 days. Less than one-half percent of the 68,000 applications were denied. It may be that in a few cases the Corps took too long to evaluate an application and perhaps subjected landowners to an unnecessarily lengthy evaluation process. However, these cases are very rare compared to the ones that go forward in a timely manner with minimal regulatory burdens.

Wetlands Protection and Mitigation Banking: Hearing Before the House Comm. on Transportation and Infrastructure Subcomm. on Water Resources and Environment, 105th Cong. (1997) (statement of Michael L. Davis, Deputy Assistant Secretary of the Army for Civil Works and Robert H. Wayland III, Director, Office of Wetlands, Oceans and Watersheds, U.S. Environmental Protection Agency (EPA)), *available at* http://www.usace.army.mil/cw/cecw-p/pcomp/davis120997.pdf.

[7] *See, e.g.*, Daniel R. Simmons & H. Sterling Burnett, National Center for Policy Analysis, *Protecting Property Rights, Preserving Federalism, and Saving Wetlands*, http://www.ncpa.org/pub/st/st291/st291a.html (last visited Mar. 20, 2007) ("the Corps and EPA have pursued civil and criminal prosecutions for small, technical violations of the Act in order to intimidate property owners and developers into compliance, although the complexity of the regulatory process and the unsettled state of the law makes compliance difficult"); National Association of Home Builders, *Corps Official Hears Wetlands Regulation Complaints*, http://www.nbnnews.com/NBN/issues/2006-05-22/Environment/2.html (last visited Mar. 20, 2007); ("Hoping for relief from what one Florida developer called 'a shameful way to treat an American citizen,' members came armed with detailed examples of missed deadlines, painfully slow permit approval processes and even 'regulatory blackmail' from local Corps officials asserting jurisdictional authority where none exists."); *see also* Pacific Legal Foundation, *Another Wetlands Horror Story: PLF Asks Appeals Court to Rein in Government's Campaign Against Cape Cod Cranberry Farmers*, May 2005, http://www.pacificlegal.org/?mvcTask=bulletinsNewsletters&nl=6&id=459&PHPSESSID=3ed290b90bb4918dedf858197212bff0 (last visited Mar. 20, 2007); National Federation of Independent Business, *Property Rights and Wetlands*, http://www.nfib.com/page/propertyRightsCases.html (last visited Mar. 20, 2007).

[8] *See, e.g.*, Claudia Copeland, *Wetlands Legislation: Comparison of Two Bills* (Congressional Research Service, 1995), *available at* http://www.ncseonline.org/nle/crsreports/wetlands/wet-2.cfm ("Section 404 has increasingly become a source of conflict between those who view it as critically important to wetland protection and others who see it as excessively intruding on privately owned property and private land-use decisions."); *The Wetland Permitting Process: Is It Working Fairly? Hearing 107-50, Hearing Before the Subcomm. on Water Resources and the Env't*, 107th Cong. (2001); *see also* Virginia S. Albrecht & Bernard N. Goode, *Wetland Regulation in the Real World* (Beverage & Diamond, P.C., 1994); Lisa Snell, *Wait Problems—Wetlands and Land Use Permits*, REASON, Oct. 1994, *available at* http://www.findarticles.com/p/articles/mi_m1568/is_n5_v26/ai_16101037.

[9] Original survey is available at U.S. Army Corps of Engineers, *Customer Service Survey—Regulatory Program*, http://www.usace.army.mil/cw/cecwo/reg/cust_surv.pdf (last visited Mar. 20, 2007) [hereinafter *Customer Service Survey*].

[10] *See infra* Section II. For a brief overview of the permitting process, see Memphis District, U.S. Army Corps of Engineers, *The Regulatory Permit Program—A Brief Guide From the Memphis District*, http://www.mvm.usace.army.mil/regulatory/Permit/permit.htm (last visited Mar. 20, 2007) ("This brochure discusses the regulatory program of the U.S. Army Corps of Engineers: what it is, how it began, how it may affect you, and what you as a concerned American can do to help.").

[11] *See infra* Appendix.

[12] *Id.*

[13] *Id. See infra* Section IV for a detailed discussion of applicant survey responses; *see also infra* Section IV.A.

[14] *See infra* Section IV.

[15] Rapanos v. United States, 126 S. Ct. 2208, 2214, 36 ELR 20116 (2006).

[16] *See* Appendix, Kansas City District section.

[17] *Id.*

[18] *Id.*

[19] Agency actions are entitled to an appropriate level of deference from the courts. Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402, 1 ELR 20110 (1971). The disconnect demonstrated here may lead to erroneous judicial review by undermining agency expertise. The data here may indicate there has been more compliance in Corps permitting with the "mood" of Congress in enacting §404 of the CWA than has previously been acknowledged in judicial review of such cases generally. *See* Universal Camera Corp. v. Labor Bd., 340 U.S. 474, 487 (1951).

[20] The Corps' current regulations state in relevant part that "[t]he U.S. Army Corps of Engineers has been involved in regulating certain activities in the nation's waters since 1890." 33 C.F.R. §320.1(a)(1) (2006). *See* U.S. Army Corps of Engineers, *Regulatory Program: Summary of History*, http://www.usace.army.mil/cw/cecwo/reg/reghist.pdf (last visited Mar. 20, 2007) (noting that the Rivers and Harbors Act of 1890 was "the first general legislation giving the Corps jurisdiction and authority over the protection of navigable waters."); *see also* Sam Kalen, *Commerce to Conservation: The Call*

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cess three types of permits: those under the Rivers and Harbors Act of 1899,[22] those under §404 of the CWA,[23] and those under the Marine Protection, Research, and Sanctuaries Act (MPRSA).[24] Interpreting exactly when a permit is needed pursuant to these provisions requires a case-by-case analysis.[25]

Section 10 of the Rivers and Harbors Act establishes permit requirements to prevent unauthorized obstruction in any traditionally navigable water of the United States.[26] The appropriate reading of the term "obstruction" under this Act is broad, per a 1899 U.S. Supreme Court decision[27] interpreting §10 of the 1890 Rivers and Harbors Act,[28] which noted that "any obstruction to the navigable capacity, and anything, wherever done or however done, within the limits of the jurisdiction of the United States which tends to destroy the navigable capacity of one of the navigable waters of the United States, is within the terms of the prohibition."[29] Thus, many modern activities fall under the §10 permitting umbrella.[30]

CWA §404 authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill material into waters of the United States at specified disposal sites.[31] Section 301 makes unlawful the discharge of any pollutant by any person, except in compliance with various sections of the Act, including §404.[32] Thus, absent certain exemptions,[33] a permit is required for many activities in all waters of the United States.[34]

Finally, the MPRSA[35] authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the transportation of dredged material to be dumped at U.S. Environmental Protection Agency (EPA)-designated sites[36] in the ocean.[37] The Corps' evaluation of such a permit application requires a determination of "whether the proposed dumping will unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological systems or economic potentialities."[38]

All three types of Corps permits are processed under a single set of procedures.[39] When there is an individual permit involved, a project manager "prepares a public notice, evaluates the impacts of the project and all comments received, negotiates necessary modifications of the project if required, and drafts or oversees drafting of appropriate documentation to support a recommended permit decision."[40]

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for a National Water Policy and the Evolution of Federal Jurisdiction Over Wetlands, 69 N.D. L. Rev. 873, 877-86 (1993).

> By the second half of the nineteenth century, federal rivers and harbors legislation was necessary before either the states or the federal government could prevent obstructions to the nation's navigable waters. Supreme Court decisions interpreting the commerce clause of the United States Constitution imposed an awkward framework that confined a state's ability to regulate activities in navigable waters. On the one hand, the Constitution prohibited states from regulating interstate commerce, while on the other hand the Court had held that there was no federal common law prohibiting the obstruction of navigable waters. Congress responded by enacting various Rivers and Harbors Acts. . . .

Id. at 879.

[21] According to its FY 2008 Budget Documentation, the Corps' Regulatory Program has approximately 1,200 regulatory staff (including biologists, engineers, archaeologists, sociologists, etc.) in 8 division and 38 district offices nationwide. These staff provide approximately 100,000 written authorizations annually, more than 100,000 jurisdictional determinations (JDs) annually, and are involved annually in approximately 4,000 unauthorized activities (enforcement cases), 7,000 permit compliance inspections, and 60 appeals (involving denied or conditioned permits or JDs). E-mail from Russell L. Kaiser, U.S. Army Corps of Engineers, "RE: Help With More Data (UNCLASSIFIED)" (Mar. 9, 2007) [hereinafter Kaiser E-mail].

[22] Rivers and Harbors Act of 1899, ch. 425, 30 Stat. 1121 (codified as amended at 33 U.S.C. §§401-418 (2000)).

[23] Federal Water Pollution Control Act (FWPCA) Amendments, Pub. L. No. 92-500, 101, 86 Stat. 816 (1972), as codified in 33 U.S.C. §1344 (2000). The FWPCA is commonly referred to as the CWA following the 1977 Amendments to the FWPCA. Pub. L. No. 95-217, 91 Stat. 1566 ("SEC. 518. This Act may be cited as the 'Federal Water Pollution Control Act' commonly referred to as the Clean Water Act.").

[24] 33 U.S.C. §§2801-2805.

[25] For example, a detailed checklist of issues to consider in determining whether a §404 permit may be required can be found in Douglas R. Williams & Kim Diana Connolly, *Federal Wetlands Regulation, An Overview*, *in* KIM DIANA CONNOLLY ET AL., WETLANDS LAW AND POLICY: UNDERSTANDING SECTION 404, at 9-17 (American Bar Ass'n 2005).

[26] *Id.* §403. *See* United States v. Republic Steel Corp., 362 U.S. 482, *reh'g denied*, 363 U.S. 858 (1960).

> The history of federal control over obstructions to the navigable capacity of our rivers and harbors goes back to *Willamette Iron Bridge Co. v. Hatch*, 125 U.S. 1, 8, where the Court held "there is no common law of the United States" which prohibits "obstructions" in our navigable rivers. Congress acted promptly, forbidding by § 10 of the Rivers and Harbors Act of 1890, 26 Stat. 426, 454, "the creation of any obstruction, not affirmatively authorized by law, to the navigable capacity" of any waters of the United States. The 1899 Act followed a report [ ] to Congress by the Secretary of War, which at the direction of Congress, 29 Stat. 234, contained a compilation and revision of existing laws relating to navigable waters. The 1899 Act was said to contain "no essential changes in the existing law."

Id.

[27] United States v. Rio Grande Irrigation Co., 174 U.S. 690 (1899).

[28] Rivers and Harbors Appropriations Act of 1890, ch. 907, 26 Stat. 426 (1890).

[29] *Rio Grande Irrigation Co.*, 174 U.S. at 708.

[30] *See* Permits for Structures or Work in or Affecting Navigable Waters of the United States, 33 C.F.R. pt. 322 (2006).

[31] 33 U.S.C. §1344. The disposal sites are specified by EPA pursuant to 40 C.F.R. pt. 230 (the "Section 404(b)(1) Guidelines"), *available at* http://www.usace.army.mil/cw/cecwo/reg/40cfr230.pdf.

[32] 33 U.S.C. §1311.

[33] 33 C.F.R. §323.4.

[34] *Id.* §323.1. As the Detroit District states: "Typical activities requiring Section 404 permits are: Depositing of fill or dredged material in waters of the U.S. or adjacent wetlands; Site development fill for residential, commercial, or recreational developments; Construction of revetments, groins, breakwaters, levees, dams, dikes, and weirs; Placement of riprap and road fills." Detroit District, U.S. Army Corps of Engineers, *A Brief Guide From the Detroit District—Corps of Engineers Regulatory Program*, http://www.lre.usace.army.mil/_kd/go.cfm?destination=page&pge_id=1678 (last visited Mar. 20, 2007).

[35] 33 U.S.C. §§2801-2805. This Act is sometimes referred to as the Ocean Dumping Act. *See* U.S. EPA, *Administering the Ocean Dumping Act*, http://www.epa.gov/history/topics/mprsa/01.htm (last visited Mar. 20, 2007).

[36] 40 C.F.R. pt. 228 (2006).

[37] *See generally* 33 C.F.R. pt. 324.

[38] *Id.* §324.4(b).

[39] *Id.* pt. 325. "The processing procedures of this Part apply to any Department of the Army (DA) permit. Special procedures and additional information are contained in 33 CFR Parts 320 through 324, 327 and Part 330." *Id.* § 325.1(a).

[40] Project managers process each of the permit applications. As the Corps explains on its website:

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Fewer requirements are associated with general permits,[41] and in fact, the vast majority of permit actions undertaken by the Corps through its §404 and §10 permitting programs are through general permits.[42] By statute, the Corps' general permits under §404 are limited to categories of activities involving discharges of dredged or fill material into waters of the United States that are similar in nature and cause only minimal adverse environmental effects when performed separately and considered cumulatively.[43]

The Corps processes an immense number of permit requests (including individual and general permits) for all sorts of projects involving aquatic resources.[44] Corps personnel[45] review between 85,000 to 90,000 permit applications per year.[46] As the regulations state, the Corps is neither "a proponent nor opponent of any permit proposal. However, the Corps believes that applicants are due a timely decision."[47]

Given the complex and necessarily subjective basis for its actions, it is not surprising that the Corps has been subject to a number of explorations of its efficacy and efficiency.[48] These explorations have occurred via judicial critique,[49] legislative examination,[50] and administrative response.[51] Thus, that the Corps' regulatory program warrants examination is not new or surprising. New, however, is the Corps seeking customer input in an effort to control quality and increase responsibility. The Corps' attempt through its Customer Service Survey to measure customer satisfaction in a setting where demands are the norm, litigation is the expectation, and ridicule by partisan interests is a popular pastime

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> Corps districts operate under what is called a project manager system, where one individual is responsible for handling an application from receipt to final decision. The project manager prepares a public notice, evaluates the impacts of the project and all comments received, negotiates necessary modifications of the project if required, and drafts or oversees drafting of appropriate documentation to support a recommended permit decision. The permit decision document includes a discussion of the environmental impacts of the project, the findings of the public interest review process, and any special evaluation required by the type of activity such as compliance determinations with the Section 404(b)(1) Guidelines or the ocean dumping criteria.

U.S. Army Corps of Engineers, *Regulatory Program Overview*, http://www.usace.army.mil/inet/functions/cw/cecwo/reg/oceover.htm (last visited Mar. 20, 2007).

[41] *See* 33 C.F.R. §323.2(g). The term "general permit" is defined as:

> [A] Department of the Army authorization that is issued on a nationwide or regional basis for a category or categories of activities when: (1) Those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or (2) The general permit would result in avoiding unnecessary duplication of regulatory control exercised by another Federal, state, or local agency provided it has been determined that the environmental consequences of the action are individually and cumulatively minimal.

Id.

[42] *See generally* 33 C.F.R. pt. 330 (2006); *see also* U.S. Army Corps of Engineers, *Nationwide Permit Program*, http://www.usace.army.mil/cw/cecwo/reg/nationwide_permits.htm (last visited Mar. 20, 2007).

[43] 33 U.S.C. §1344(e).

[44] ExpectMore.gov, *Detailed Information on the Corps of Engineers: Regulatory Program Assessment*, http://www.whitehouse.gov/omb/expectmore/detail.10001130.2005.html (last visited Mar. 20, 2007).

[45] Note that my criticisms of the Corps are directed at the headquarters-level policy and not at individual personnel who implement that policy on a daily basis. I have had the good fortune of becoming personally acquainted with dozens of Corps regulatory staff through my experience as an instructor in the Proponent-Sponsored Engineer Corps Training (PROSPECT) program. *See* U.S. Army Corps of Engineers, *Professional Development Support Center*, http://pdsc.usace.army.mil/ (last visited Mar. 20, 2007). It has been incredibly rewarding to work with many regulatory and other Corps staff as an instructor in that program since 1998, teaching the Environmental Laws and Regulations course. *See* Environmental Partners, *USACE Training*, http://www.environmentalpartners.net/training.htm (last visited Mar. 20, 2007). Through this experience, I have concluded that terrific individuals are employed by the Corps, but are often hampered in achieving environmental protection by less-than-terrific mandates in flawed Corps regulations and guidance documents.

[46] *See, e.g.*, U.S. Army Corps of Engineers, *U.S. Army Corps of Engineers Regulatory Program*, http://www.usace.army.mil/inet/functions/cw/cecwo/reg/2003webcharts.pdf (last visited Mar. 20, 2007).

[47] 33 C.F.R. §320.1(a)(4).

[48] Whether administrative agency activities should be entirely efficient is, of course, another line of questioning that many scholars have explored. *See, e.g.*, Robert V. Percival, *Regulatory Evolution and the Future of Environmental Policy*, 1997 U. CHI. LEGAL F. 159 (1997); Cynthia R. Farina, *The Consent of the Governed: Against Simple Rules for a Complex World*, 72 CHI.-KENT. L. REV. 987 (1997); Thomas O. McGarity, *Some Thoughts on "Deossifying" the Rulemaking Process*, 41 DUKE L.J. 1385 (1992); Patricia M. Wald, *Regulation at Risk: Are Courts Part of the Solution or Most of the Problem?*, 67 S. CAL. L. REV. 621 (1994); Gary Lawson, *The Rise and Rise of the Administrative State*, 107 HARV. L. REV. 1231 (1994); W. Kip Viscusi, *Regulating the Regulators*, 63 U. CHI. L. REV. 1423 (1996); Edward Rubin, *It's Time to Make the Administrative Procedure Act Administrative*, 89 CORNELL L. REV. 95 (2003).

[49] *See, e.g.*, Northern California River Watch v. City of Healdsburg, 456 F.3d 1023, 36 ELR 20163 (9th Cir. 2006); Baccarat Fremont Developers v. Corps of Eng'rs, 425 F.3d 1150, 35 ELR 20212 (9th Cir. 2005), *cert. denied*, __U.S.__ (2007); City of Shoreacres v. Waterworth, 420 F.3d 440, 35 ELR 20162 (5th Cir. 2005); Greater Yellowstone Coalition v. Flowers, 359 F.3d 1257, 34 ELR 20019 (10th Cir. 2004); Utahns for Better Transp. v. Department of Transp., 305 F.3d 1152, 33 ELR 20036 (10th Cir. 2002); City of Olmsted Falls v. EPA, 233 F. Supp. 2d 890 (N.D. Ohio 2002); Wetlands Action Network v. Corps of Eng'rs, 222 F.3d 1105, 31 ELR 20051 (9th Cir. 2000), *cert. denied*, 534 U.S. 815 (2001); Home Builders Ass'n of Greater Chicago v. Corps Eng'rs, 335 F.3d 607, 33 ELR 20236 (7th Cir. 2003); United States v. Krilich, 209 F.3d 968, 33 ELR 20035 (7th Cir. 2000), *cert. denied*, 121 S. Ct. 482 (2000); United States v. Hallmark Constr. Co., 200 F.3d 1076, 30 ELR 20266 (7th Cir. 2000); United States v. Mango, 199 F.3d 85, 30 ELR 20220 (2d Cir. 1999); Michigan Peat v. EPA, 175 F.3d 422, 29 ELR 21125 (6th Cir. 1999); Alaska Ctr. for the Env't v. West, 157 F.3d 680, 29 ELR 20001 (9th Cir. 1998); United States v. Hallmark Constr. Co., 14 F. Supp. 2d 1065, 29 ELR 20274 (N.D. Ill. 1998); Friends of the Crystal River v. EPA, 35 F.3d 1073, 24 ELR 21490 (6th Cir. 1994); Hoffman Homes, Inc. v. EPA, 999 F.2d 256, 23 ELR 21139 (7th Cir. 1993); United States v. Cumberland Farms of Conn., Inc., 826 F.2d 1151, 17 ELR 21270 (1st Cir. 1987), *cert. denied*, 484 U.S. 1061 (1988); Friends of the Earth v. Hintz, 800 F.2d 822, 17 ELR 20030 (9th Cir. 1986); Buttrey v. United States, 690 F.2d 1170, 13 ELR 20085 (5th Cir. 1982), *cert. denied*, 461 U.S. 927 (1983).

[50] On August 1, 2006, for example, the U.S. Senate Subcommittee on Fisheries, Wildlife, and Water held a hearing on the effect of the *Rapanos* decision. *Interpreting the Effect of the U.S. Supreme Court's Recent Decision in the Joint Cases of* Rapanos v. United States *and* Carabell v. U.S. Army Corps of Engineers *on "The Waters of the United States": Hearing Before the Senate Subcomm. on Fish, Wildlife, and Water*, 109th Cong. (2006). Statements from the hearing are available at http://epw.senate.gov/hearing_statements.cfm?id=259992. For a streaming video of that hearing, see U.S. Senate Committee on Environment and Public Works, *EPW Multimedia*, http://epw.senate.gov/epwmultimedia/epwmultimedia.htm (last visited Mar. 20, 2007).

[51] Corps administrative materials, including documents such as Regulatory Guidance Letters and Memoranda of Agreement, as well as relevant Executive Orders from the president, are compiled on their headquarters website at http://www.usace.army.mil/cw/cecwo/reg/sadmin3.htm (last visited Mar. 20, 2007).

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provides adequate justification to examine the survey results.[52] The following section, accordingly, focuses on the genesis and current administration of customer service surveying by the Corps.

III. The Corps' Regulatory Customer Focus

The federal agency focus on customer satisfaction emerged from a larger national effort[53] at the beginning of the Clinton Administration to "reinvent government,"[54] an effort that culminated in the National Performance Review.[55]

As part of this reinvention effort, in September 1993, Vice President Al Gore released a report[56] declaring that

> [w]e will invent a government that puts people first, by: cutting unnecessary spending; serving its customers; empowering its employees; Helping communities solve their own problems; fostering excellence . . . . Here's how. We will: create a clear sense of mission; steer more, row less; delegate authority and responsibility; replace regulations with incentives; develop budgets based on outcomes; expose federal operations to competition; search for market, not administrative solutions; measure our success by customer satisfaction.[57]

Such a focus on the federal government's customers also generated a 1993 Executive Order from President William J. Clinton entitled *Setting Customer Service Standards*.[58] The Executive Order stated that "the Federal Government must be customer-driven. The standard of quality for services provided to the public shall be: Customer service equal to the best in business."[59] A customer, for purposes of the Executive Order, was defined as "an individual or entity who is directly served by a department or agency."[60] Agencies were instructed to survey their customers "to determine the kind and quality of services they want and their level of satisfaction with existing services."[61] Reports to the president with respect to such surveys, among other things, were required by 1994.[62] The modern Corps' Regulatory Program Customer Service Survey still cites this Executive Order.[63]

In 1995, President Clinton went even further in a follow-up memorandum, entitled *Improving Customer Service*,[64] which mandated continued customer and employee surveys as well as benchmarking strategic initiatives as part of the federal government, "in order to continue customer service reform. . . ."[65]

Federal reinvention efforts catalyzed the Clinton Administration to form the Interagency Working Group on Federal Wetlands Policy in 1993, which in turn drafted *Protecting America's Wetlands: A Fair, Flexible, and Effective Approach*.[66] This report acknowledged the need to improve wetlands protections and streamline the §404 permitting process.[67] The report pointed to the combination of "the environmental and economic significance of wetlands, the alarming rate of wetlands loss, and concerns for private landowners"[68] and proposed initiatives to "strongly support the effective protection and restoration of the Nation's wetlands, while advocating much-needed reforms to increase the fairness and flexibility of Federal regulatory programs."[69] Some of those initiatives were adopted, but many were not.[70]

Some time thereafter, the Corps began surveying its customers. Older versions of the Corps' Customer Service Survey can still be found on the Internet.[71] The Corps' current Customer Service Survey is available on many Corps district regulatory websites[72] as well as the headquarters website.[73]

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[52] Note that the analysis here is not an in-depth statistical one, given that I have no expertise in the science of statistics. My brief analysis of the data in this Article demonstrates, however, that a more rigorous assessment of the data may be warranted.

[53] *See, e.g.*, Government Performance Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (codified in scattered sections of Titles 5, 31, and 39 of the U.S. Code), *available at* http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m.html (last visited Mar. 20, 2007). As the U.S. Governmental Accountability Office (then known as the U.S. General Accounting Office (GAO)) explained in a 56-page report: "GPRA requires agencies to set goals, measure performance, and report on their accomplishments." U.S. GAO, Executive Guide-Effectively Implementing the Government Performance and Results Act 1 (1996) (GAO/GGD-96-118), *available at* http://www.gao.gov/archive/1996/gg96118.pdf.

[54] Nancy J. Knauer attributes the term "reinventing government" to David Osborne and Ted Gaebler. *See* Nancy J. Knauer, *Reinventing Government: The Promise of Institutional Choice and Government-Created Charitable Organizations*, 41 N.Y.L. Sch. L. Rev. 945, 946 (1997); *see also* David Osborne & Ted Gaebler, Reinventing Government: How the Entrepreneurial Spirit Is Transforming the Public Sector (Addison-Wesley 1991).

[55] *See generally* National Partnership for Reinventing Government Reports (formerly the National Performance Review), Homepage, http://govinfo.library.unt.edu/npr/library/review.html (last visited Mar. 20, 2007). Note that some scholars have declared fundamental aspects of the National Performance Review to have been unsuccessful. *See, e.g.*, Steven L. Schooner, *Fear of Oversight: The Fundamental Failure of Businesslike Government*, 50 Am. U.L. Rev. 627 (2001); *see also* Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. Chi. L. Rev. 1 (1995); Paul R. Verkuil, *Is Efficient Government an Oxymoron?*, 43 Duke L.J. 1221 (1994).

[56] *See* Vice President Al Gore, From Red Tape to Results: Creating a Government That Works Better and Costs Less (1993), *available at* http://govinfo.library.unt.edu/npr/library/nprrpt/annrpt/redtpe93/index.html); *see also* Knauer, *supra* note 54, at 963 n.36-45 and accompanying text.

[57] *Id.*

[58] Exec. Order No. 12862, Setting Customer Service Standards (1993), *available at* http://govinfo.library.unt.edu/npr/library/direct/orders/2222.html.

[59] *Id.*

[60] *Id.*

[61] *Id.*

[62] *Id.*

[63] *See Customer Service Survey*, *supra* note 9, at 2.

[64] The White House Office of the Press Secretary, Memorandum for Heads of Executive Departments and Agencies "Improving Customer Service" (1995), *available at* http://govinfo.library.unt.edu/npr/library/direct/memos/249a.html.

[65] *Id.*

[66] White House Office on Environmental Policy, Protecting America's Wetlands: A Fair, Flexible, and Effective Approach (1993), *available at* http://www.wetlands.com/fed/aug93wet.htm.

[67] *Id.*

[68] *Id.* Introduction.

[69] *Id.*

[70] *See Two Years of Progress: Meeting Our Commitment for Wetlands Reform; Protecting America's Wetlands: A Fair, Flexible, and Effective Approach, August 1993—August 1995*, http://www.wetlands.com/fed/dec95wet.htm (last visited Mar. 20, 2007).

[71] *See* http://www.usace.army.mil/cw/cecwo/reg/cust_surv.pdf (last visited Mar. 20, 2007).

[72] *See, e.g.*, Baltimore District, U.S. Army Corps of Engineers, *Regulatory Program Customer Survey*, http://www.nab.usace.army.mil/Regulatory/survey.htm (last visited Mar. 20, 2007); Detroit District, U.S. Army Corps of Engineers, *Regulatory Program Customer Ser-*

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In addition to its history as part of the reinvention process, the Corps' Customer Service Survey is also identified as the product of a newer management system called Lean Six Sigma.[74] According to a 2006 Corps press release, the Corps uses Lean Six Sigma "to accelerate business transformation."[75] The Corps points to the system as "intended to create a culture of continuous, measurable improvement and innovation that eliminates non-value-added activities and increases quality and responsiveness."[76] The Corps' Regulatory Program is using Lean Six Sigma to assess and plan improvements for current operations.[77]

Lean Six Sigma is actually a set of two complementary business improvement methodologies, Lean and Six Sigma.[78] The Lean method maximizes profit velocity by analyzing process flow and delay times at each activity in a process.[79] It centers on the separation of "value-added" work with tools to eliminate the root causes (and costs) of "non-value-added" activities.[80] The Lean approach is intended to provide a means for quantifying and eliminating the cost of complexity.[81]

The Six Sigma methodology emphasizes the need to recognize opportunities and eliminate defects as defined by customers and recognizes that variation hinders the ability to deliver high-quality services reliably.[82] Six Sigma requires data-driven decisions and framework-based problem solving within a highly prescriptive cultural infrastructure effective in obtaining sustainable results.[83] The keys of the combined Lean Six Sigma approach include "delighting" customers with speed and quality,[84] improving processes by eliminating quality and speed variations as well as generally improving process flow and speed,[85] working as a team for maximum gain,[86] and basing decisions on data and facts.[87] The project-focused approach consists of five phases—define, measure, analyze, improve, and control (DMAIC)—known as the DMAIC model.[88]

Though the Lean Six Sigma methodologies evolved in the manufacturing area,[89] noncorporate organizations have begun using them as well.[90] Lean Six Sigma is useful to these organizations because processes involving services are usually slow and therefore expensive for the organization,[91] since "(i)n any slow process, 80% of the delay is caused by less than 20% of the activities."[92] Examples of government organizations that use the methodologies, in addition to the U.S. Department of the Army, include the U.S. Department of the Navy[93] and the city of Fort Wayne,[94] both of which laud the program.[95]

Outside of the permitting component of Corps operations,[96] the Corps as a whole[97] has developed a broader Cus-

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vice Survey, http://www.lre.usace.army.mil/functions/rf/html/survey.htm (last visited Mar. 20, 2007); Jacksonville District, U.S. Army Corps of Engineers, *Electronic Survey Form*, http://www.saj.usace.army.mil/permit/forms/customer_service.htm (last visited Mar. 20, 2007); Little Rock District, U.S. Army Corps of Engineers, *Customer Service Survey*, http://www.swl.usace.army.mil/regulatory/customersurvey.html (last visited Mar. 20, 2007). It is worth noting that the "current" survey, available on these sites and the main Corps website, expired in 2005. *See Customer Service Survey*, *supra* note 9.

[73] *See Customer Service Survey*, *supra* note 9.

[74] Telephone Interview with Lance D. Wood, U.S. Army Corps of Engineers (July 26, 2006) [hereinafter Wood Interview].

[75] *See* U.S. Army Corps of Engineers, *Corps Points, Weekly Focus—Lean Six Sigma*, http://www.hq.usace.army.mil/cepa/corpspoints/5-11-06.htm (last visited Mar. 20, 2007); *see also* U.S. Army Materiel Command, *Lean Six Sigma Basics*, http://www.amc.army.mil/lean/page.aspx?id=0 (last visited Mar. 20, 2007).

[76] *Id.*

[77] Kaiser E-mail, *supra* note 21 ("The Corps also is currently involved in completing a Lean 6 Sigma analysis of its regulatory program, which includes a thorough examination of budget, resource allocation, workload, and performance standards with the ultimate goal of eliminating unnecessary and non-valued added process and simplifying the §404 regulatory program.").

[78] Mike George et al., What Is Lean Six Sigma? 7 (McGraw-Hill 2004).

[79] *Id.*

[80] *Id.*

[81] *Id.*

[82] *Id.*

[83] *Id.*

[84] *Id.* at 11.

[85] *Id.* at 20.

[86] *Id.* at 29.

[87] *Id.* at 34.

[88] *Id.* at 58.

[89] *Id.* at 10.

[90] *Id.* at ix. In a recent *Armed Forces Comptroller* article, U.S. Department of Navy personnel proclaimed the program's success, saying that the department "looks forward to continued success stories and the opportunity to share stories within and outside the (Department of Defense)." Denise Bar et al. *Department of the Navy Lean Six Sigma: A Financial Journey: A Total Team Effort to Employ Lean Six Sigma Concepts Pays Dividends (Company Overview)*, Armed Forces Comptroller, Jan. 2006, at 41, *available at* http://www.accessmylibrary.com/coms2/summary_0286-15077378_ITM. The city of Fort Wayne, Indiana, is listed in *Lean Six Sigma for Service* as an example of an organization that experienced success with the program; after its implementation, many city departments allegedly saw improvements in the area of service to citizens, a significant decrease in costs, or better use of resources. *See* George et al., *supra* note 78, at 6.

[91] *Id.* at 12-13.

[92] *Id.*

[93] *See* Bar et al., *supra* note 90, at 38-41. The Navy uses the Lean Six Sigma principles in three of its major command systems: (1) the Naval Sea Systems Command; (2) the Naval Air Systems Command; and (3) the Space and Naval Warfare Command. *Id.* at 39.

[94] Mayor Graham Richard of Fort Wayne authorized the use of Lean Six Sigma for many city projects. *See* City of Fort Wayne, *Six Sigma*, http://www.cityoffortwayne.org/index.php?option=com_content&task=view&id=1012&Itemid=1154 (last visited Mar. 20, 2007).

[95] See principles used by the Navy, *supra* note 93.

[96] Despite this Article's focus on the regulatory branch, the bulk of Corps personnel work on large-scale engineering and civil works matters, described by the Corps as including:

> [P]lanning, designing, building and operating water resources and other civil works projects (Navigation, Flood Control, Environmental Protection, Disaster Response, etc.); designing and managing the construction of military facilities for the Army and Air Force. (Military Construction); and providing design and construction management support for other Defense and federal agencies. (Interagency and International Services).

U.S. Army Corps of Engineers, *Who We Are*, http://www.usace.army.mil/who (last visited Mar. 20, 2007). The Corps declares: "Today, as always, we stand ready . . . engineers, scientists, real estate specialists and administrators alike to meet national security, emergency and other national requirements." *Id.* The Regulatory Branch declares its specific mission as follows:

> The mission of the Corps of Engineers Regulatory Program is to protect the Nation's aquatic resources, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps evaluates permit applications for essentially all construction activities that occur in the Nation's waters, including wetlands. Corps permits are also nec-

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tomer Outreach Training Curriculum[98] that contains six training opportunities for Corps personnel: (1) Customer Service; (2) Customer Outreach Tutorial; (3) Customer Outreach for Executives; (4) Customer Outreach Overview Workshop; (5) Strategic Outreach Plan Workshop; and (6) Account Management Workshop.[99] Corps Civil Works operations, likewise, have been publicly committed to customer service for years, with some districts even saying that customers are "on the team."[100] Like the Regulatory Program, Corps military operations have been surveying their installation customers for years.[101] Amusingly, one Corps survey instrument in the Programs Management Division has a series of smiley-face and frowning-face icons on their survey, presumably to help those filling out the form.[102] In short, the Corps is demonstrating an organizationwide commitment to securing customer input.

Although the Customer Service Surveys reviewed for this Article appear to have been completed by permit applicants only,[103] Corps policy states that applicants are not the only customers of its regulatory branch.[104] Linked from its main web page is the Corps Regulatory Program's Public Service Commitment, in which the Corps promises to "conduct ourselves in a professional manner in dealings with all our customers, including applicants, violators, agencies, interest groups and the general public."[105] The Customer Service Survey itself identifies customers as all who are interested in the Regulatory Program.[106]

In keeping with the 1993 Executive Order,[107] many other federal agencies have adopted strategies for focusing on their customers. Like the Corps, however, they too have struggled to find an appropriate definition of the term customer.[108] Some define customer broadly to include program participants and third-party interests, some define customer narrowly to include only program participants, and some use the term without defining it at all. Nevertheless, many other federal agencies do survey customers to obtain their opinions about matters relating to a particular agency.

For the purposes of its Customer Service Surveys, the Corps' Regulatory Program defines customers as those who "submitted a permit application, requested a jurisdictional determination or wetland delineation, or scheduled a preapplication meeting" as well as those who receive its public notices or commented on a particular project or work.[109] Thus, Corps' Regulatory Program surveys apparently were designed to solicit input from both participants in the regulatory program as well as some third-party stakeholders who comment on particular projects or the regulatory program's work in general.[110] The surveys are posted directly on the front page of the Corps' Regulatory Program website[111] and on some district websites.[112] Yet the

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> essary for any work, including construction and dredging, in the Nation's navigable waters. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who want to use their land. During the permit process, the Corps considers the views of other Federal, state and local agencies, interest groups, and the general public. The results of this careful public interest review are fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting the authorized impacts to the waters of the US. The adverse impacts to the aquatic environment are offset by mitigation requirements, which may include restoring, enhancing, creating and preserving aquatic functions and values. The Corps strives to make its permit decisions in a timely manner that minimizes impacts to the regulated public.

U.S. Army Corps of Engineers, *Regulatory Programs Mission Statement*, http://www.usace.army.mil/cw/cecwo/reg/mission.htm (last visited Mar. 20, 2007).

[97] The Corps missions page declares:

> The United States Army Corps of Engineers serves the Armed Forces and the Nation by providing vital engineering services and capabilities, as a public service, across the full spectrum of operations—from peace to war—in support of national interests. Corps missions include five broad areas: Water Resources; Environment; Infrastructure; Homeland Security; Warfighting.

U.S. Army Corps of Engineers, *Missions*, http://www.usace.army.mil/missions (last visited Mar. 20, 2007).

[98] U.S. Army Corps of Engineers, *Customer Training Outreach Brochure*, http://www.usace.army.mil/essc/intra/customer/curricul.pdf (last visited Mar. 20, 2007).

[99] *See also* U.S. Army Corps of Engineers, *USACE Program's Outreach Toolkit*, http://www.usace.army.mil/essc/intra/customer/outreach.htm (last visited Mar. 20, 2007).

[100] Rock Island District, U.S. Army Corps of Engineers, *Corps Customers*, http://www2.mvr.usace.army.mil/FullStory.cfm?ID=403 (last visited Mar. 20, 2007) ("'Starting in October we will no longer be customer oriented,' said [the Chief of Engineers, Lt. Gen. Robert] Flowers, 'because the customers will be on our teams.'")

[101] *See, e.g.*, U.S. ARMY CORPS OF ENGINEERS, CUSTOMER SATISFACTION SURVEY MILITARY PROGRAMS 1998 REPORT (1999), *available at* http://www.usace.army.mil/essc/intra/surveys/mp1998/mp1998.pdf.

> The U.S. Army Corps of Engineers (USACE), Directorate of Military Programs (CEMP), conducted its fourth standard customer satisfaction survey of customers in the spring-summer of 1998. This report contains results and insights gained from analyzing feedback from about 700 Military Programs (MP) customers and displays results by question, by customer organizational level and by customer group.

Id.

[102] Directorate of Military Programs, U.S. Army Corps of Engineers, *Customer Survey*, https://ppdscivil.usace.army.mil/hecsurv/ (last visited Mar. 20, 2007).

[103] *See Customer Service Survey*, *supra* note 9.

[104] Note that the Corps conducts other "customer" surveys for additional roles it plays, such as providing recreational opportunities in various locations throughout the nation. *See* ExpectMore.gov, *Detailed Information on the Corps of Engineers: Recreation Management Assessment*, http://www.whitehouse.gov/OMB/expectmore/detail.10002002.2005.html (last visited Mar. 20, 2007) ("Corps customer comment card surveys reveal that 90% of respondents rated the overall quality of facilities and services as good or very good.").

[105] U.S. Army Corps of Engineers, *Public Service Commitment*, http://www.usace.army.mil/cw/cecwo/reg/pubserv.htm (last visited Mar. 20, 2007). As one early reviewer of this Article pointed out, it is odd that the Corps considers "violators" to be among its customer base, but then again the Corps works frequently with violators to provide after-the-fact permits. *See* 33 C.F.R. §326.3(e) for a description of requirements associated with after-the-fact permits.

[106] *See Customer Service Survey*, *supra* note 9. There apparently was some debate about this decision within the agency. *See* Wood Interview, *supra* note 74.

[107] *See supra* note 58.

[108] The Executive Order definition of customer is "an individual or entity who is directly served by a department or agency," *see id.*, must not have been sufficiently clear for many agencies.

[109] *See Customer Service Survey*, *supra* note 9.

[110] *Id.*

[111] *Id.*

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review of the hundreds of surveys undertaken for this Article disclosed that none appeared to be submitted to the Corps by a third-party stakeholder.

Other federal agencies cast their customer focus in slightly different language. For example, the U.S. Department of Health and Human Services (HHS) has what it terms a customer service vision.[113] Within HHS, the U.S. Food and Drug Administration (FDA) also has its own customer service standards.[114] The FDA defines customer as "a person or organization (internal or external) that receives a product or service anywhere along the product's life cycle."[115] The FDA considers the American public its primary customer, but also views as customers the following: the U.S. Congress, HHS itself as well as other government agencies, health care groups/providers, and the industries it regulates.[116] The FDA surveys its customers regularly, although not in an ongoing manner, as the University of Michigan discussed in a 2000 survey report, which showed "that consumers continue to be satisfied with the FDA's performance in food labeling and consumer alerts on food safety issues. . . ."[117]

Likewise, EPA used to focus on customers through its formal customer service program, which it phased out in 2002.[118] While in existence, the program "assisted in gathering customer feedback, shared best practices and made customer service skills training available."[119] EPA included within its definition of customer a plethora of categories: regulated industries, such as manufacturers and power companies; agriculture; small businesses, such as dry cleaners, printers, and developers; consultants; local governments; states; grant applicants; public interest groups; community-based groups, including environmental organizations; the public; Congress; EPA program offices; EPA employees; EPA regional program offices; other federal agencies; and international/global organizations.[120] EPA's Office of Policy, Economics, and Innovation facilitated the old customer service program and "still supports customer satisfaction survey work."[121] EPA also continues to apply certain principles of customer service today.[122]

Unlike EPA and its now-defunct customer service program, the Internal Revenue Service (IRS) surveys only a limited universe of those with whom it has contact. Through its Taxpayer Advocacy Service, the IRS surveys its customers via a "customer satisfaction survey . . . on a continuous basis to ensure alignment of its program, policies and procedures with the needs and expectations of its customers."[123] According to the IRS website: "The purpose of the survey, which is voluntary and anonymous, is to determine the satisfaction level of taxpayers and practitioners who have recently received assistance from the Taxpayer Advocate Service."[124] The IRS does not otherwise define customer.

Some other federal agencies use the term customer but do not define it. For example, the Federal Communications Commission (FCC) proclaims it has "customer service stan-

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[112] See various district websites *supra* note 72.

[113] FDA's customer service vision reads:

> The U.S. Dept. of Health and Human Services (HHS) will provide its external and internal customers with courteous, timely, and efficient service that will exceed customer expectations and equal the best in business. In order to continuously improve its services, HHS will encourage and use ongoing customer feedback to help establish its customer service standards and performance measures, and share results with its customers.

U.S. Food & Drug Administration (FDA), *Customer Service Policy*, http://www.fda.gov/comments/customer.html (last visited Mar. 20, 2007).

[114] These standards include the following:

> All FDA customers are entitled to: fair, courteous and professional treatment; information that is accurate and current; timely responses to requests; reasonable access to appropriate staff; confidence that efforts are made to assure that regulated products in the marketplace are in compliance with FDA laws and regulations; two-way communication; opportunities for collaboration and partnerships, as appropriate; participation in the agency's decision-making process; and consideration of their opinions and concerns by the agency. In addition, consumers are entitled to accurate and timely health information about regulated products; health professionals are entitled to timely information that will assist them in advancing and protecting the public health; other government agencies are entitled to cooperation from the FDA in maximizing efficient use of resources, eliminating duplication of efforts and carrying out collaborative efforts and technical assistance, training and guidance; and regulated industry is entitled to timely review of product applications, professional treatment in resolving disputes, fair application of laws and regulations in enforcement activities, fair and consistent inspections and product application reviews, and respect in the agency's performance of duties and responsibilities.

U.S. FDA, *FDA Customer Service Standards*, http://www.fda.gov/comments/standard.html (last visited Mar. 20, 2007).

[115] Quality Resource & Development Team, U.S. FDA, Defining the Customer in a Regulatory Agency (2004), *available at* http://www.fda.gov/cder/gmp/gmp2004/defining_customer.htm.

[116] *Id.* With respect to calling the industries it regulates "customers," the FDA admits that "(t)he idea of regulated industry as a customer has been an uncomfortable one for FDA" and hopes to "be able to expand our vocabulary to adopt more fitting references to industry." *Id.*

[117] U.S. HHS, Customer Satisfaction Results for the Food and Drug Administration Remain Constant (2000), http://www.fda.gov/bhs/topics/NEWS/NEW00746.html (discussing a survey "conducted by the University of Michigan using a model established for the American Customer Satisfaction Index, which measures satisfaction with various industries.")

[118] *See* U.S. EPA, *About the Customer Service Program*, http://www.epa.gov/customerservice/csabout.htm (last visited Mar. 20, 2007).

[119] *Id.*

[120] *See* U.S. EPA, *Who Are EPA's Customers?: Fact Sheet*, http://www.epa.gov/customerservice/pdfs/fs1r.pdf (last visited Mar. 20, 2007).

[121] *See* U.S. EPA, *supra* note 118.

[122] *Id.* The six principles include:

> (1) Be helpful! Listen to your customers; (2) Respond to all phone calls by the end of the next business day; (3) Respond to all correspondence within 10 business days; (4) Make clear, timely, accurate information accessible; (5) Work collaboratively with partners to improve all products and services; and (6) Involve customers and use their ideas and input.

U.S. EPA, *Customer Service Standards*, http://www.epa.gov/customerservice/standards.htm#principles (last visited Mar. 20, 2007).

The standards for core processes include "public access standards," "research grants standards," "permitting standards," "pesticides regulation standards," "partnership programs standards," "state, tribal, and local program grants standards," "enforcement inspections and compliance assistance standards," and "rulemaking standards. U.S. EPA, *Customer Service Standards of the United States Environmental Protection Agency*, http://www.epa.gov/customerservice/pdfs/standards.pdf (last visited Mar. 20, 2007).

[123] *See* IRS, U.S. Department of the Treasury, *Taxpayer Advocate Service Customer Satisfaction Survey*, http://www.irs.gov/privacy/article/0,,id=159723,00.html (last visited Mar. 20, 2007).

[124] *Id.*

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dards."[125] The FCC welcomes comments from its customers by e-mail and telephone, and makes such people aware of the opportunity via its website.[126] Nowhere, however, does the FCC define customer or state from whom it would accept comments. Likewise, the U.S. Fish and Wildlife Service (FWS) launched a Customer Service Center in 2003.[127] The FWS' Customer Service Center reports that it "currently averages 8,300 phone calls and 400 e-mails per month."[128] The center also uses a customer satisfaction survey to which the public response "remains very favorable and complementary."[129] However, the FWS does not define customer or otherwise state whether the people from whom it receives input include third-party interest groups in addition to program participants, or program participants only.

In sum, federal agency customer involvement, including surveys, takes many and varied paths. Their origins, and the origins of the Corps' current Customer Service Survey, are of interest because they aid in understanding the nature of federal government commitment to fairness, flexibility, and efficiency. Still, it is the data that these surveys provide that offer the fullest opportunity to reflect on the disconnect between perception and reality with respect to the burdens imposed by the Corps' Regulatory Program. Accordingly, the following section explores these available data in more depth.

IV. Corps Customer Service Survey Results

To determine what Corps Customer Service Surveys might reveal about the permitting program and related matters,[130] eight Corps districts from around the nation[131] were initially selected and sent Freedom of Information Act (FOIA)[132] requests for copies of responses to customer service surveys.[133] The surprising result was that six weeks later, only two of the districts in the initial sample supplied copies of any completed surveys, and half responded that they did not survey their permit applicants.[134] Shortly thereafter, similar FOIA requests were sent to the rest of the 38 districts[135] asking for survey responses for the years 2002-2005.[136]

All 38 districts responded.[137] As it turns out, not all Corps district Regulatory Programs survey their custom-

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[125] FCC, *Customer Service Standards*, http://www.fcc.gov/css.html (last visited Mar. 20, 2007).

[126] *See* FCC, *Customer Satisfaction Report*, http://www.fcc.gov/css.html#report (last visited Mar. 20, 2007).

[127] *See* U.S. FWS, *Customer Service Center*, http://www.fws.gov/info/pocketguide/csc.htm (last visited Mar. 20, 2007).

[128] *Id.*

[129] *Id.*

[130] It is particularly interesting to discuss the Corps' permitting process with law and graduate students in classes that cover laws governing wetlands and other waters of the United States. Virtually all law students are new to the Corps' regulatory process, and most are amazed at the low percentage of permit denials, and what some perceive as overly applicant-friendly approaches to the processing of permit requests. In particular, as we discussed the Corps' Customer Service Survey in my Vermont Law School Wetlands Law and Policy class in previous years, students had a lot of questions regarding these surveys and their results in terms of what it would show about the permitting program overall.

[131] The initial surveys were sent out to the following random sample of districts in November 2005: Charleston; Galveston; Huntington; Jacksonville; New England; New Orleans; Philadelphia; Sacramento; and St. Paul.

[132] 5 U.S.C. §552, *available in* ELR Stat. Admin. Proc.

[133] The original letters to districts contained the following substantive text:

> Under the Freedom of Information Act, 5 U.S.C. §552, this letter requests copies of all customer service surveys submitted to the [specific] District Office by permit applicants in the years 2002 to present. Please see http://www.usace.army.mil/inet/functions/cw/cecwo/reg/cust_surv.pdf for a sample survey.
>
> I ask for a waiver of any fees connected with this request because this request is made in the public interest and the furnishing of this information should be considered as primarily benefiting the general public. 32 C.F.R. §518.84 (2004). According to the Department of Defense's regulations, the fee waiver will be granted if the primary purpose of the request is to contribute significantly to public understanding of the operations or activities of the Department of Defense and is not primarily in commercial interest of the requester. *Id.* In this instance, the request is likely to contribute significantly to the public understanding of the actions surrounding permit applications in the Charleston District, because I plan to use the information to write an article that will be available to the public. This information will not be used for any financial or commercial gain. *Id.*
>
> If this request cannot be handled free of charge, please notify me immediately of the reasons behind the denial and the cost that will be involved prior to any copying. I am aware of and do not waive any of my rights under law, including: to receive a response to this request within 20 days, to be informed of the grounds if this request is denied, to appeal any denial, and to receive copies of excepted information from a document where other sections have been declared exempt from this request.

[134] Only the Jacksonville and Sacramento Districts provided survey responses. Note that New Orleans and Huntington did not respond to the initial request.

[135] The remaining letters went out in late 2005 and early 2006. The text of the letters included the following request:

> Re: FOIA Request for Completed Customer Service Surveys 2002 to Present
>
> Dear FOIA Officer:
>
> Under the Freedom of Information Act, 5 U.S.C. §552, this letter requests copies of all customer service surveys submitted to your district office by permit applicants in the years 2002 to present. Please see http://www.usace.army.mil/inet/functions/cw/cecwo/reg/cust_surv.pdf for a sample survey.
>
> I ask for a waiver of any fees connected with this request because this request is made in the public interest and the furnishing of this information should be considered as primarily benefiting the general public. 32 C.F.R. §518.84 (2004). According to the Department of Defense's regulations, the fee waiver will be granted if the primary purpose of the request is to contribute significantly to public understanding of the operations or activities of the Department of Defense and is not primarily in commercial interest of the requester. *Id.* In this instance, the request is likely to contribute significantly to the public understanding of the actions surrounding permit applications in your district, because I plan to use the information to write an article that will be available to the public. This information will not be used for any financial or commercial gain. *Id.*
>
> If this request cannot be handled free of charge, please notify me immediately of the reasons behind the denial and the cost that will be involved prior to any copying. I am aware of and do not waive any of my rights under law, including: to receive a response to this request within 20 days, to be informed of the grounds if this request is denied, to appeal any denial, and to receive copies of excepted information from a document where other sections have been declared exempt from this request.

[136] See the specific text *supra* note 135.

[137] A full list of Corps district offices can be found at U.S. Army Corps of Engineers, *Regulatory Program—District Offices*, http://www.

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ers.[138] In fact, 20 districts reported having any survey responses,[139] and 3 of those reporting survey responses had a statistically insignificant number of only one or two surveys total.[140]

Generally, those districts that regularly survey their permit applicants have found them to be satisfied with the process.[141] In those districts that reported with a statistically significant number of surveys,[142] more than half of respondents evaluating their overall experience with the Corps' Regulatory Program gave "high satisfaction" ratings, as shown in Table 1.

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usace.army.mil/cw/cecwo/reg/district.htm (last visited Mar. 20. 2007).

[138] *See* Appendix. Note that during my research, Corps Headquarters staff confirmed that all districts *should* be surveying their customers. Telephone Interview with Russell L. Kaiser, Headquarters, U.S. Army Corps of Engineers (Mar. 9, 2007). It is not clear to Corps Headquarters why some districts do not engage in surveys. *Id.*

[139] Those districts that do not report any Regulatory Program surveys are: Buffalo; Chicago; Detroit; Fort Worth; Galveston; Honolulu; Huntington; Los Angeles; Louisville; Nashville; New England; New York; Norfolk; Philadelphia; Pittsburgh; San Francisco; St. Paul; and Tulsa. Note that the Charleston District provided a response to the FOIA request too late to have quotations from the survey written comments appear in the text of the Article, although all such comments are included in the compiled Appendix.

[140] The Baltimore District had only one response, and the Omaha and Vicksburg Districts had only two responses each. *See* Appendix.

[141] *See* Appendix.

[142] For these purposes, I am excluding the three districts that had only one or two survey responses. *See supra* note 140.

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Table 1: Overall Satisfaction Rankings From Districts That Reported Survey Reponses 2002-2005

District	Overall Satisfaction Rankings[a]		District	Overall Satisfaction Rankings[a]	
Alaska	984 survey responses reported. · Rating of 1: 16 (2%) · Rating of 2: 19 (2%) · Rating of 3: 130 (13%)	· Rating of 4: 396 (40%) · Rating of 5: 352 (36%) · Rating of N/A[b]: 71 (7%)	Omaha	2 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 0 (0%)	· Rating of 4: 0 (0%) · Rating of 5: 2 (100%) · Rating of N/A: 0 (0%)
Albuquerque	156 survey responses reported. · Rating of 1: 0% · Rating of 2: 0% · Rating of 3: 0%	· Rating of 4: 20 (13%) · Rating of 5: 131 (84%) · Rating of N/A: 5 (3%)	Portland	7 survey responses reported. · Rating of 1: 1 (14%) · Rating of 2: 2 (29%) · Rating of 3: 0 (0%)	· Rating of 4: 0 (0%) · Rating of 5: 4 (57%) · Rating of N/A: 0 (0%)
Baltimore	1 survey response reported. · Rating of 1: 0 (0%) · Rating of 2: 1 (100%) · Rating of 3: 0 (0%)	· Rating of 4: 0 (0%) · Rating of 5: 0 (0%) · Rating of N/A: 0 (0%)	Rock Island	180 survey responses reported. · Rating of 1: 1 (1%) · Rating of 2: 1 (1%) · Rating of 3: 3 (2%)	· Rating of 4: 60 (33%) · Rating of 5: 99 (55%) · Rating of N/A: 16 (9%)
Charleston	96 survey responses reported. · Rating of 1: 5 (5%) · Rating of 2: 9 (9%) · Rating of 3: 9 (9%)	· Rating of 4: 23 (24%) · Rating of 5: 45 (47%) · Rating of N/A: 5 (7%)	Sacramento	447 survey responses reported. · Rating of 1: 9 (2%) · Rating of 2: 11 (2%) · Rating of 3: 28 (6%)	· Rating of 4: 113 (25%) · Rating of 5: 256 (57%) · Rating of N/A: 30 (7%)
Jacksonville	34 survey responses reported. · Rating of 1: 9 (26%) · Rating of 2: 3 (9%) · Rating of 3: 5 (15%)	· Rating of 4: 8 (24%) · Rating of 5: 7 (21%) · Rating of N/A: 2 (6%)	Savannah	370 survey responses reported. · Rating of 1: 8 (2%) · Rating of 2: 17 (4%) · Rating of 3: 25 (7%)	· Rating of 4: 138 (37%) · Rating of 5: 161 (44%) · Rating of N/A: 21 (6%)
Kansas City	25 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 3 (12%)	· Rating of 4: 4 (16%) · Rating of 5: 18 (72%) · Rating of N/A: 0 (0%)	Seattle	6 survey responses reported. · Rating of 1: 2 (33%) · Rating of 2: 0 (0%) · Rating of 3: 1 (17%)	· Rating of 4: 0 (0%) · Rating of 5: 3 (50%) · Rating of N/A: 0 (0%)
Little Rock	40 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 2 (5%)	· Rating of 4: 5 (13%) · Rating of 5: 32 (80%) · Rating of N/A: 1 (3%)	St. Louis	14 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 0 (0%)	· Rating of 4: 2 (14%) · Rating of 5: 10 (71%) · Rating of N/A: 2 (14%)
Memphis	19 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 1 (5%)	· Rating of 4: 3 (16%) · Rating of 5: 14 (74%) · Rating of N/A: 1 (5%)	Vicksburg	2 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 0 (0%)	· Rating of 4: 1 (50%) · Rating of 5: 1 (50%) · Rating of N/A: 0 (0%)
Mobile	50 survey responses reported. · Rating of 1: 3 (6%) · Rating of 2: 2 (4%) · Rating of 3: 5 (10%)	· Rating of 4: 12 (24%) · Rating of 5: 24 (48%) · Rating of N/A: 4 (8%)	Walla Walla	12 survey responses reported. · Rating of 1: 0 (0%) · Rating of 2: 0 (0%) · Rating of 3: 0 (0%)	· Rating of 4: 3 (25%) · Rating of 5: 9 (75%) · Rating of N/A: 0 (0%)
New Orleans	168 survey responses reported. · Rating of 1: 4 (2%) · Rating of 2: 3 (2%) · Rating of 3: 11 (7%)	· Rating of 4: 64 (38%) · Rating of 5: 77 (46%) · Rating of N/A: 9 (5%)	Wilmington	489 survey responses reported. · Rating of 1: 4 (1%) · Rating of 2: 5 (1%) · Rating of 3: 17 (3%)	· Rating of 4: 131 (27%) · Rating of 5: 326 (67%) · Rating of N/A: 6 (1%)

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[a] These are the results for the response requested of all survey participants: "5. What is your OVERALL rating of the level of service provided by the Corps' Regulatory Program." *See* U.S. Army Corps of Engineers, *Customer Service Survey—Regulatory Program*, http://www.usace.army.mil/cw/cecwo/reg/cust_surv.pdf (last visited Mar. 20, 2007). Ranking percentages are rounded to the nearest whole number. Rating of 5: 82% means that the survey respondents ranked the district at the level of five (the best of the rankings) 82% of the time. Note that due to rounding issues not all percentage totals will add up to 100.

[b] Survey responses characterized as N/A in this table (defined on the Corps' survey as "does not apply to you") include those respondents who chose that option on the form, as well as those who did not check any answer.

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The Corps' survey instrument is two pages long.[143] On the first page, the survey provides an opportunity to rank the Corps numerically on a variety of matters using a scale of 1-5.[144] Instead of providing a specific breakdown on what these numbers mean, the numbers 1-3 appear under a grouped category of low satisfaction.[145] Then the numbers 4 and 5, as well as N/A,[146] appear under a grouped category of high satisfaction.[147] The second page of the survey allows applicants to check off categories that indicate some specific details about their interaction with Corps regulatory personnel, and space is provided to write comments about that interaction.[148] One district (Alaska) has designed its own one-page form, but it still provides space for written comment and an overall ranking score.[149]

Written comments are prompted by the question: "Do you have any comments or suggestions on the Regulatory Program?"[150] The Appendix contains a full compilation of the comments from surveys collected through the FOIA process. The written commentary can be divided into five categories: (1) general praise for the Corps' Regulatory Program service; (2) praise (mostly) for particular Corps employees' service; (3) comments (including praise and complaints) about the length and complexity of the permitting process; (4) general recommendations and criticisms (often focused on staff workload or technological improvement); and (5) larger policy-based commentary on the permitting program.[151] The subsections that follow provide representative examples from each category above.

A. General Praise for the Corps' Regulatory Program Service

Many applicants who completed surveys had general praise for the Corps, often focusing specifically on a particular district office's work. For example, one applicant from the Albuquerque District declared that "[s]ervice was exemplary."[152] Another stated that "[e]veryone that I met at the Corps has been very helpful."[153] An applicant from the Sacramento District declared Corps staff "[e]specially helpful."[154] A Walla Walla District applicant said: "I have had a great working relationship with the Corp[s]."[155] A Wilmington District applicant wrote: "I feel the program is well run, responses are prompt and detailed, and the contacts in the office are knowledgeable and helpful."[156]

Some of these comments providing general praise to the Regulatory Program were specific to certain district office activities. For example, one Kansas City District applicant wrote:

> By far and without question, I am extremely impressed with the technical knowledge and communication skills of the regulatory specialists in the [Kansas City] office. Our firm works with four regional Corps offices in the Midwest USA in application of 100+ [§]404 permits annually. Although we may not always agree with staff decisions, we are treated fairly and professionally by the regulatory specialists who work under the supervision of [Corps employee].[157]

Likewise, a Little Rock District office applicant wrote: "I was very impressed by this office's cooperation to resolve permitting issues even when the project manager was unavailable."[158]

Like the Kansas City District comment from the previous paragraph, some commenters had experience in multiple districts, and provided comparative comments. For example, one applicant from the Savannah District wrote: "We work in numerous districts. Savannah is by far the most professional and effective."[159] One from the Wilmington District suggested: "Update the Wilmington District Web site. The Charleston District has an outstanding Web site—user friendly with good information."[160]

Other comments were more general. For example, a Rock Island District office applicant wrote: "We appreciate your help in the past and look forward to working with [Corps] personnel in the future. [Corps] personnel have always been helpful and have taken care of permit applications in a very timely manner. Thanks!"[161] A New Orleans District applicant said: "Very helpful. This is my first time going through the permit process overall. I was happy with the process."[162] Finally, a Sacramento District applicant wrote with similar enthusiasm that "[e]veryone including secretaries, receptionist, and higher ups have been polite, professional and responsive to our needs—Thank you Corps and [Corps employee]!"[163] An Alaska District applicant corre-

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[143] *See Customer Service Survey*, *supra* note 9.

[144] *Id.*

[145] *Id.*

[146] The term "N/A" is defined on the Corps' survey as "does not apply to you." *Id.*

[147] *Id.* The survey contains text in a separate box above the area with the numbers that seems to set forth the scoring system in a somewhat different manner from the actual survey layout, by stating that "for each question, please indicate the level of service you received by marking the appropriate number on a scale from 1-5, with 1 being low ("dissatisfied") and 5 being high (very satisfied)." *Id.*

[148] *Id.*

[149] Although the online form for the Alaska District is the same as the one used nationally by other districts, the forms returned to me in response to the FOIA request were unique, one-page forms. *See* http://www.poa.usace.army.mil/reg/CustSurvey.pdf (last visited Mar. 20, 2007).

[150] *Id.*

[151] There are undoubtedly other ways that the results could be organized, but this approach seemed to provide the most constructive review for my purposes.

[152] *See* Appendix, Albuquerque District section.

[153] *Id.*

[154] *See id.*, Sacramento District section.

[155] *See id.*, Walla Walla District section.

[156] *See id.*, Wilmington District section.

[157] *See id.*, Kansas City District section.

[158] *See id.*, Little Rock District section. Another Little Rock District customer agreed with this principle, saying: "I sincerely appreciate the level of quality service and support on the project." *Id.*

[159] *See id.*, Savannah District section. Another Savannah District commenter wrote: "We have always found the Albany office specifically to be knowledgeable, prompt and fair. If all of the USACOE districts were as good, our lives would be a lot easier! Keep up the good work." *Id.*

[160] *See id.*, Wilmington District section.

[161] *See id.*, Rock Island section. Other Rock Island District customers agreed with this concept, noting that "[c]onsidering our situation I thought the Corp representatives handled everything very well" and "[t]he staff of the Regulatory Branch have always been very knowledgeable and helpful." *Id.*

[162] *See id.*, New Orleans District section.

[163] *See id.*, Sacramento District section. Other Sacramento District customers share similar sentiments, providing comments like: "Everyone I spoke with was extremely helpful and professional. The Web

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spondingly wrote: "The permit process went smoothly and was very effective."[164]

Of course, not all comments were complimentary. One applicant from the Albuquerque District said: "Program hard to understand and jurisdictional issues are not well defined."[165] Likewise, a Jacksonville District applicant wrote that "[t]he attitude of staff was unprofessional and adversarial. The staff threatened with absolutely no basis in fact or regulations."[166]

Such negative comments generally were few and far between, while positive comments were the norm. As to such praise about the Corps' Regulatory Program generally or a particular district office specifically, comments like "[e]xcellent service,"[167] "[y]ou guys do a good job!,"[168] or "thank you"[169] were not uncommon. The surveys thus show that many Corps permit applicants are not only content, but in some cases delighted, with their overall exposure to the Regulatory Program.

B. Praise (Mostly) for Specific Corps Employees' Service

Another significant general category of comments containing positive feedback was directed at the actions of specific Corps employees. Many times, such comments were extraordinarily enthusiastic.[170] For example, one Rock Island District applicant called on the Corps to "[g]ive [the particular Corps employee] a raise and more vacation."[171] Likewise, an Albuquerque District applicant declared: "[Corps employee] did an outstanding job of investigating my situation and getting back to me in record time. He was prompt and professional! Thank you [Corps employee] and Corps of Engineers. This man was one of the best professionals I have ever worked with."[172] A Memphis District applicant wrote:

> I want to commend all those involved in the Memphis Corps District, especially [Corps employee] for the prompt and processing and issuance of the individual 404 that I needed. As always, [Corps employee] communicated with me about issues needing clarification, and made special efforts to issue by a deadline I was under. This is just one example of the top-notch work performed by your District. Thank you![173]

A Sacramento District applicant wrote: "[Corps employee] was very professional and very, very helpful."[174] A Savannah District applicant said: "[Corps employee] enters into his duties in a most energetic and professional manner. He's good at suggesting changes that will assist you with your project, and come within regulations."[175]

In the Rock Island District, one applicant wrote: "It is a big help to have people like [Corps employee] to explain the complexities and options clearly and accurately. Qualified people administering the program make it workable."[176] In the St. Louis District, an applicant praised multiple employees who had contact with the application process by saying: "[Corps employees] were very helpful, fair and professional. They are a credit to your staff and their profession."[177] Likewise, in the New Orleans District, one applicant wrote: "[Corps employee] was the most professional and understanding person I have ever dealt with. He made what I heard would be a nightmare, not bad at all. God bless him."[178] Another New Orleans District applicant wrote:

> If all the permit writers were as professional, responsible and responsive as [Corps employee], you would have fewer complaints and irate applicants. He does exactly what he says he will do in a timely manner. He is clear about his objectives and does not vacillate, even when pressured. He is not afraid to be candid and direct.[179]

In the Walla Walla District, an applicant noted that "I was sure surprised with all the help I got from [Corps employee]."[180] One Alaska District applicant wrote: "I have

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page is also very helpful." and "I am impressed with the professional, timely manner that the permit application was processed." *Id.*

[164] *See id.*, Alaska District section.

[165] *See id.*, Albuquerque District section.

[166] *See id.*, Jacksonville District section.

[167] *See id.*, Sacramento District section.

[168] *Id.*

[169] *See* Appendix throughout.

[170] There were, of course, a few negative comments about particular Corps employees. For example, about an Albuquerque District employee one respondent noted: "Get personality in Phoenix office personnel. I spoke to [Corps employee] on several occasions; the conversations seem to be fruitless. He doesn't appear to put the plans and descriptions . . . . Therefore having our business bottleneck." *See* Appendix, Albuquerque District section. *See also infra* notes 183-84 and accompanying text.

[171] *See* Appendix, Rock Island District section. Such sentiment is not unique to Rock Island—a Sacramento District applicant wrote a very similar comment saying that "[Corps employee] was great—give her a raise." *See id.*, Sacramento District section.

[172] *See id.*, Albuquerque District section. Another Albuquerque applicant wrote: "[Corps employee] was extremely helpful during the whole process starting from our pre-application meetings during which she provided us with clear direction in our attempt to comply with regulations. [Corps employee] responded promptly to phone calls and issued our permit in a very reasonable time frame." *Id.*

[173] *See id.*, Memphis District section.

[174] *See id.*, Sacramento District section. Another Sacramento District applicant wrote: "[Corps employee] has given me exceptional service in understanding and submitting ACOE permit applications. We truly appreciate the information she gave us to assist us in expediting the permit process and look forward to working with her in the future." A different Sacramento District applicant summarized the experience by noting that "[Corps employee] was as reasonable and helpful as I could have hoped for." *Id.*

[175] *See id.*, Savannah District section. Another Savannah District applicant wrote: "I found everyone (including receptionist) to be very pleasant and helpful. The professionals were responsive in a timely manner. I requested an inspection, after construction, to ensure compliance. They responded promptly and were very helpful through the entire project." *Id.*

[176] *See id.*, Rock Island District section. Another Rock Island applicant wrote: "In our case the Corps Representative played the part of the mediator between us and dealing with other agencies involved between the program and the representative. The process on our behalf went very smoothly and very professional with everyone involved." *Id.*

[177] *See id.*, St. Louis District section. Another St. Louis applicant wrote: "Keep doing what you are doing. I have always found [Corps employees] to be very fair and forthright in addressing DA permit requirements on difficult improvement projects." *Id.*

[178] *See id.*, New Orleans District section. Likewise, another New Orleans District applicant wrote:

> If all the permit writers were as professional, responsible and responsive as [Corps employee], you would have fewer complaints and irate applicants. He does exactly what he says he will do in a timely manner. He is clear about his objectives and does not vacillate, even when pressured. He is not afraid to be candid and direct.

Id.

[179] *Id.*

[180] *See id.*, Walla Walla District section. Other Walla Walla District applicants were equally pleased, writing: "I was impressed and very

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never had this fast of response time from any Federal Agency. Thanks, [Corps employee]."[181] Another Alaska District respondent commented that "[o]n a scale of 5 and 1, your Regulatory Specialist, [Corps employee], deserved a 6!"[182]

A few of those submitting surveys were not as complimentary about Corps employees. One Wilmington district applicant said: "They need to speed up to a slow walk."[183] An Alaska District applicant noted that "[r]equests for additional information were numerous and cumbersome. The instruction for what is required for a project should be clearly spelled out. This may help limit the discrepancies between what different project managers require. Travel by the project manager delayed the permit process."[184] But such negative responses about particular employees were highly unusual for most districts. The survey results viewed as a whole shows that most Corps permit applicants have particularly good experiences with individual Corps Regulatory Program personnel.

C. Comments About the Length and Complexity of the Permitting Process

The data show an appreciable number of survey complaints in some districts that were focused on the length and/or complexity of the Corps' permitting process. There are, however, significant variations among districts, and survey respondents in some districts had mainly praise for the prompt responses.[185] Moreover, many of those providing comments about delay suggested that it was workload and not staff failings that lead to their complaints. For example, one Mobile District applicant declared that "[t]hree months or longer is way too long to have to wait for replies from [the Corps]."[186] A Sacramento District applicant noted they believed

> that [Corps employee] helped us as best he could, but given his workload, he could not respond in a timely manner. It took a month after he received the last document needed for permit approval to get us the permit. We submitted our permit application at the end of August, and received the permit at the end of November.[187]

Likewise, an applicant from the Jacksonville District "[a]pplied for permit approx [date]. This took a year to receive. However, after your agency began to work on the permit, it was fast and delivery was quick and professional."[188]

Some of those raising complaints about the delays offered suggestions for how to cure them, such as one Sacramento District applicant who said: "Staff seems knowledgeable and courteous, just maybe overloaded. For large projects, developers would trade higher fees (use of 'approved' consultants perhaps) for speedier permits."[189] Yet others suggested modifications to the process that might further delay their permit review, such as the Sacramento District applicant who declared there was a need for

> more rapid review of submitted materials and quicker turn-around time for written responses to applicant. Need more rapid response to phone calls as well. Many of the special conditions in this and other permits are standard clauses that might be applicable to some of the businesses above, but not necessarily to public entities. This standard language seems to be for the benefit of [Corps] staff in issuing a permit so as not to have to create customized conditions relevant to the subject action. Some of this language can have unacceptable legal implications. Our requests to remove or modify conditions, with explanations provided, were largely ignored.

A New Orleans District applicant wrote: "[Corps employee] was extremely helpful. My only suggestion is that the time for permit submission to approval be speeded up (if not limited by statute)."[190]

Those who complained about timeliness, however, were often careful to note that certain Corps employees were not to blame. One comment from the Memphis District said: "Need more timely approval and issuance of permit. . . . However, Corps personnel were very helpful."[191] Likewise, in the Rock Island District, one applicant wrote that "[t]he process is very thorough and time consuming, but the Corps personnel were very helpful and professional."[192] In the Seattle District, one applicant stated that "[Corps employee] is very competent, but slow in processing documentation and returning phone calls or email." In the Wilmington District, an applicant stated: "[Corps employee] was wonderful, helpful, good at explaining and clarifying the process and thorough. He's worth waiting for. But if there are three times as many of him our only complaint is the length of time the process took, because of the workload on limited personnel members."[193] A Savannah District applicant wrote: "You have a good program but seem to be over worked."[194]

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pleased with how quickly [Corps employee] handled the work." and "[Corps employee] is great to work with. I wish that all agencies were as helpful." *Id.*

[181] *See id.*, Alaska District section. With the largest number of responses, the Alaska District had a huge number of positive remarks. For example, another applicant from the Alaska District wrote: "Thanks to [Corps employee] for his expeditious assistance," another remarked that "[Corps employee] was effective in resolving environmental issues without the need to heap on a pile of bureaucracy" and another said that "[Corps employees] have been super to work with. All have been knowledgeable, responsive, and easy to work with." *Id.*

[182] *Id.*

[183] *See id.*, Wilmington District section.

[184] *See id.*, Alaska District section. Another Alaska District applicant wrote that "[Corps employee] is great to work with. [Corps employee] is not good to work with." *Id.*

[185] *See* Appendix. For purposes of this statement I am not including the districts with less than 10 survey responses, because it seems more likely that disgruntled applicants would have submitted the form. In those districts with statistically significant response rates, though, the results are quite mixed. For example, those commenting in the Alaska, Alhuquerque, Little Rock, and Memphis Districts seemed to have significantly more praise than disappointment with the permit processing times. Conversely, those commenting from Jacksonville, Mobile, and New Orleans Districts seemed to have more negative than positive things to say about permit processing times. Comments about response timeliness from Charleston, Kansas City, Rock Island, Sacramento, Savannah, St. Louis, Walla Walla, and Wilmington Districts were either mixed or had too few comments on timeliness to generalize.

[186] *See* Appendix, Mobile District section. Compare, however, another Mobile District applicant who commented that the "Mobile District has been very responsive." *Id.*

[187] *See id.*, Sacramento District section.

[188] *See id.*, Jacksonville District section.

[189] *See id.*, Sacramento District section.

[190] *See id.*, New Orleans District section.

[191] *See id.*, Memphis District section.

[192] *See id.*, Rock Island District section.

[193] *See id.*, Wilmington District section.

[194] *See id.*, Savannah District section. Another Savannah District respondent suggested different offices within their particular district have different levels of response, commenting that "North Area Sec-

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Finally, in a similar vein, a Sacramento District applicant commented that "[a]s usual, the Corps needs more staff in the Regulatory Branch to improve service-time. Service overall was good and staff were courteous and helpful."[195]

Applicant complaints on the Corps Regulatory Program's failure to process permits in a timely manner were not, however, universal. Contrary to the quotes in the previous paragraph, other Sacramento District applicants said: "Great job on timeliness" or "[t]hanks for the speedy response!" An Albuquerque District applicant likewise wrote: "[Corps employee's] response was immediate and thorough. He was very helpful in answering additional questions. He is always courteous."[196] In the Rock Island District, one applicant wrote: "We appreciate the fast processing of this permit modification."[197] In the Savannah District, one survey respondent commented that the assigned Corps employee "provided very prompt service."[198] And in the Alaska District, one respondent said: "Thank you for a 'speedy' courteous service."[199]

Likewise, it seems that the Corps may be making progress in responding to complaints about timely processing, as evidenced by one Sacramento District respondent who wrote: "In the past the Corps has not been reasonable or quick in responding. This time it went well."[200] A respondent in the Wilmington District wrote: " I want to note that staff changes/reassignments in Wilmington have resulted in much better response time. . . ."[201] In the Alaska District, one applicant wrote: "In past years (8-10 years) the Corps were really nasty to deal with. There has been a complete attitude change."[202] A Savannah District respondent remarked: "Outstanding permitting. Less time required than ever before."[203] Nevertheless, it cannot be denied that the survey data show some districts still experiencing challenges in timely processing of permit applications and related activities.

D. Recommendations and Complaints Focused on Technological or Educational Improvement Suggestions

Some recommendations and complaints submitted by survey respondents dealt with technological suggestions, such as an Albuquerque District applicant who recommended that "you add to your Web site (or if this is already there, make it more obvious) a general timeline of the [§]404 application process and a process flowchart, including what contacts and decisions that may be made at various points."[204] Another recommended that the Corps "[m]ake the Internet more user friendly—e.g., downloadable permit form."[205] An Alaska District applicant remarked that the "[w]ebsite is generally very slow."[206]

Other complaints recommended implementing deadlines for responses. A Jacksonville District applicant noted: "So overworked and understaffed to handle such a large workload, that the process becomes management through government permitting! Staff adequately, then create reasonable, specific response times which the Corps must respond within. Not having any time accountability is not fair to the public or private sector."[207] Some complaints focused on difficulties in contacting people, such as the Sacramento District comment noting it was "[d]ifficult to reach person in office—no admin staff to answer/take calls"[208] and an Alaska District comment stating: "Call backs take a couple of days. I assume you are very busy."[209]

A few complaints centered on Corps employees' familiarity with the process. For example, one Portland District applicant noted that "[i]ndividuals in the permitting process should be better aware of the Corps' own regulations. I had to point them out!"[210] A Sacramento District applicant likewise stated that "[i]nterpretation of regulations is arbitrary. There is no consistency between project managers."[211] However, one Wilmington District applicant suggested that

> [i]t might be helpful to offer some kind of program to help applicants become more educated as to which course to take towards project approvals. I'm referring mainly to mitigation options but also to options on avoiding impacting as well. Maybe seminars for surveyors engineers landscape architects soil scientists. I got my best advice from the Corps. I think I have received poor advice from private consultants.[212]

Thus, some survey responses support other changes, in addition to speeding up the process, that the Corps' Regulatory Program should explore. Certain reported improvements currently in process at Corps headquarters[213] may address a number of these issues.

E. Policy-Based Commentary on the Permitting Program

Some comments by survey respondents went to larger, policy-level issues. A significant number of these comments

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tion has many, many problems that should be resolved including excessive timeframes, inconsistency, unresponsiveness and general lack of knowledge. Southern Section (Savannah) generally much better." *Id.*

[195] *See id.*, Sacramento District section. Another Sacramento commenter similarly noted:

> Both individuals were very courteous and professional, though I think they are overloaded with work such that they can't make decisions in a timely and accurate manner. I respect the work they are doing, though I don't think much thought or time was given to this project due to their overwhelming workload.

Id.

[196] *See id.*, Albuquerque District section.

[197] *See id.*, Rock Island District section.

[198] *See id.*, Savannah District section.

[199] *See id.*, Alaska District section.

[200] *See id.*, Sacramento District section. Another Sacramento District respondent wrote: "The improvements over the past few years have been fantastic. We still need to improve overall communication, but it seems to be getting better all the time." *Id.*

[201] *See id.*, Wilmington District section.

[202] *See id.*, Alaska District section.

[203] *See id.*, Savannah District section.

[204] *See id.*, Sacramento District section.

[205] *Id.* Contrast that with another Sacramento District applicant who wrote: "The Web site is very helpful and always seems to be up-to-date. Our Corps representative is very helpful and always tries to respond to our questions. He is very knowledgeable and has a wide range of experience that is helpful when trying to find solutions for a complex project." *Id.*

[206] *See id.*, Alaska District section.

[207] *See id.*, Sacramento District section.

[208] *Id.*

[209] *See id.*, Alaska District section.

[210] *See id.*, Portland District section.

[211] *See id.*, Sacramento District section.

[212] *See id.*, Wilmington District section.

[213] *See infra* note 255 and accompanying paragraph.

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support the program as it is or call for it to be strengthened. For example, one Sacramento District comment suggested that the Corps "[h]ire more personnel to keep up with all the demands and violations. Stop being just a 'permitting agency' and be a regulatory agency—don't just issue permits to everyone—Say NO sometimes (which the Corps rarely does) and enforce violations."[214] Similarly, a Savannah District applicant called on the Corps to "[s]pend more time on enforcement and compliance."[215] Likewise, in the Albuquerque District, an applicant suggested the Corps provide "[m]ore outreach and education about the permit program. Didn't like the way the Corps has backed off on permits for [a particular watershed] due to losing a Supreme Court decision on a sand and gravel quarry; don't see how they relate."[216] In a similar vein, a Rock Island District comment remarked that "[a]ll seemed reasonable to me. – It's the people that do not apply but take law into their own hands that disturb me."[217] A Sacramento District comment called on the Corps to "[q]uit nit-picking the small (really small) stuff and bust people's chops for violations or failing to follow thru w/mitigation. Require bonding for all mitigation activities (that will make them do it!)."[218]

Other suggestions presented innovative training or staffing ideas. For example, a Wilmington District applicant suggested that "[t]he Corps should cont[inue] efforts to dev[elop] a certified wetland delineator program. Valuable time could be saved by allowing Corps reps. to make/sign JDs from an [official] review or a cert delineators submittal rather than requiring a site review every time."[219] A Kansas City District applicant suggested that "[m]aybe you could have some trained retired people or other trained parties to do screening of compliance spot checks. They would report to the project manager who would either visit the site or take the spot checkers information to develop the violation report. Photographic records could help formalize the process."[220] One Savannah District applicant suggested that the government "[t]ransfer jurisdiction over wetlands out of the Army to a better managed and customer-friendly organization."[221] Yet one Wilmington District applicant wrote very positively that the "Regulatory Program is completely justified. It serves the purpose to protect wetlands and all the benefits of wetlands. Wetlands must be protected."[222]

F. Concluding Remarks on the Survey Comments

Readers should not think that there were no clearly negative general comments. There were quite a few. One applicant from the Sacramento District complained about the district office, saying that "[i]t's slow, cumbersome and staffed by people who are not motivated to produce a finished product. The only agency I would rate lower is [FWS]! [The Corps/FWS] staff need to forget personal biases and do their job."[223] Likewise, an applicant from the same district claimed to be

> [v]ery unsatisfied with how a piece of land was taken care of. I was confused of what they were doing for approximately six months. Then was not instructed on how to secure a permit or even if I needed one. All they have done is delayed progress for me on approximately 1/2-acre of wet property.[224]

And yet another wrote, "[r]eceived no response to submitted materials for 4 1/2 months; had to make 14 phone calls and resubmit to receive any response."[225] A Wilmington District applicant wrote: "Please stop taking our land."[226]

Despite such seemingly heartfelt complaints from a few applicants, the majority of those who completed the Corps' Regulatory Program Customer Service Surveys are satisfied with the Corps. For example, one Rock Island District applicant claimed to be a "[s]atisfied customer."[227] Another declared herself or himself to be "totally satisfied with entire program in particular the friendly personnel."[228] Sacramento District applicants also joined in the chorus of praise, telling the Corps "[t]hank you. Very interesting process." and "[i]t was easier than expected."[229] An Albuquerque District applicant likewise wrote the Corps to say: "Your agency is a pleasure to work with."[230] In the Alaska District, one applicant wrote: "Great, efficient service!" and another: "Good job!"[231] These statements and others, along with the rating numbers,[232] show a very different agency than one

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[214] *See* Appendix, Sacramento District section. A Wilmington District applicant wrote likewise:

> Where is the enforcement program? It seems that there is very little Corps/Federal enforcement in western North Carolina (Charlotte and westward) of unauthorized activities. It is hard as a consultant to tell developers what they are and are not allowed to do when the guy down the road is completely ignoring the 404-401 program. Why hasn't North Carolina been able to announce a $550,000 fine like the recently announced Corps violation against the Mungo Co. in Columbia SC?

See id., Wilmington District section.

[215] *See id.*, Savannah District section.

[216] *See id.*, Albuquerque District section.

[217] *See id.*, Rock Island District section.

[218] *See id.*, Sacramento District section.

[219] *See id.*, Wilmington District section.

[220] *See id.*, Kansas City District section.

[221] *See id.*, Savannah District section.

[222] *See id.*, Wilmington District section.

[223] *See id.*, Sacramento District section.

[224] *Id.*

[225] *Id.*

[226] *See id.*, Wilmington District section. Another Wilmington District applicant wrote:

> Too much discretion given to individuals—verbally told one thing and documented something else. Process too long and redundant. Received permit after excessive jumping through hoops and not given enough time to get state and local permits. Forced to start over to what appears to be worse than the first time. System totally unfair in my mind! I have never been through any process like this and am totally disillusioned. I, to my knowledge, have done everything by the book and get shot down over and over. Contrary to advise given by many others I thought that playing by the rules was the proper and right thing to do. To my knowledge no one has ever said the project is not permittable. Just seems that I am being taught a lesson by doing things the right way. The wetlands on my project are not of a significant nature. Was informed by the local Corp field rep that buying into the mitigation project is not possible. I have been informed by others that it is. I have contracted with [contractor] . . . .

Id.

[227] *See id.*, Rock Island District section.

[228] *Id.*

[229] *Id.*

[230] *See id.*, Albuquerque District section.

[231] *See id.*, Alaska District section.

[232] *See supra* tbl. 1.

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would expect from Justice Scalia's remarks in *Rapanos* that opened this Article.[233]

V. Conclusion: What Does Having "Satisfied Customers" Really Mean?

The Corps' Regulatory Program declares that it has three equally important goals: "(1) To provide strong protection of the Nation's aquatic environment, including wetlands; (2) To enhance the efficiency of the Corps' administration of its regulatory program; and (3) To ensure that the Corps provides the regulated public with fair and reasonable decisions."[234] As to these second and third goals, as explored in the previous section, the Corps seems to be doing a decent job from the perspective of a considerable segment of the regulated public. In fact, in the words of some who experienced the permitting experience, the "[p]rogram seems to be appropriate, sensible, and effective"[235] and the "[p]ermit process was smooth and fair."[236]

Admittedly, the data presented here are imperfect.[237] Many districts do not conduct surveys.[238] Some districts reported very few surveys.[239] There is no way of knowing the background of those who responded to the surveys.[240] But, as discussed above, the data do demonstrate a degree of disconnect between the views of some (including Justice Scalia and some vocal representatives of the regulated community) and the reality expressed directly by a significant number of applicants.[241]

Although technically dicta, Justice Scalia's invective against the Corps' Regulatory Program preceded a plurality opinion that provided no deference to the Corps in its interpretation of proper jurisdiction.[242] To the extent that Justice Scalia's distrust of the Corps' process may not be not based on supportable data, the reliability of the administrative review process by the judicial branch may be in question.[243] Because the two newest Justices (Chief Justice John G. Roberts Jr. and Justice Samuel A. Alito Jr.) signed on to the opinion authored by Justice Scalia,[244] this matter warrants further examination.

In addition to these issues with judicial review, the data also suggest a number of changes to agency operations are needed. First, the fact that only certain districts survey customers demonstrates that Corps headquarters needs to find a way to make its districts more accountable.[245] Whether or not one concludes that surveying is still mandatory under the 1993 Executive Order,[246] the Corps should be consistent in surveying activities nationwide. Likewise, it may be a good time to update the customer survey instrument in light of Lean Six Sigma[247] and analysis of data received through those surveys over the years.[248]

Additionally, with respect to agency operations, the level of expressed dissatisfaction with delays[249] means efforts should be amplified in certain districts to speed up permitting. Recent increases in funding to the Corps' Regulatory Program likely helped,[250] but more or reallocated federal appropriations and an increased workforce seem to be needed. Furthermore, other efficiency measures in the works by the Corps' Regulatory Program (such as having permit applications online on most districts,[251] the "lead district" initiative,[252] new regulatory guidance letters,[253] and an

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[233] *See supra* notes 3, 4 and accompanying text.

[234] U.S. Army Corps of Engineers, *Regulatory Program Goals*, http://www.usace.army.mil/cw/cecwo/reg/goals.htm (last visited Mar. 20, 2007). Interestingly, a fourth goal appears in a 2006 PowerPoint® presentation to the Regional Regulatory Office: "Take care of our Regulatory Personnel." U.S. Army Corps of Engineers, *Regional Regulatory Conference June 2006* (PowerPoint® Presentation, on file with the author).

[235] *See* Appendix, Kansas City District section.

[236] *See id.*, Rock Island District section.

[237] Note that my analysis, as a non-scientist lawyer, might also be considered "imperfect" in terms of truly dissecting the data.

[238] *See supra* note 139.

[239] The Baltimore District had only one response, and the Omaha and Vicksburg Districts had only two responses each. *See* Appendix.

[240] Because the survey instrument allows anonymous feedback, we cannot know for example what percentage of respondents had either their permit application denied or not modified at all.

[241] Proper "marketing" by the Corps of their own survey results may be able to do a bit of damage control on that score.

[242] (Quoting *Chevron, U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 843, 14 ELR 20507 (1984), the *Rapanos* plurality ruled specifically that "[t]he Corps' expansive interpretation of the 'the waters of the United States' [was] not 'based on a permissible construction of the statute.'"). Rapanos v. United States, 126 S. Ct. 2208, 2236 36 ELR 20116 (2006). *Cf.* "The Corps' decision in the underlying cases to treat these wetlands as encompassed within the term 'waters of the United States' is a quintessential example of the Executive's reasonable interpretation of a statutory provision." *Rapanos*, 126 S. Ct. at 2252 (J. Stevens, dissenting).

[243] *See supra* note 19 and accompanying text.

[244] *Rapanos*, 126 S. Ct. at 2214.

[245] Corps Districts have been accused of operating too independently and without sufficient headquarters-level control in the past. *See, e.g.*, U.S. GAO, WATERS AND WETLANDS: CORPS OF ENGINEERS NEEDS TO EVALUATE ITS DISTRICT OFFICE PRACTICES IN DETERMINING JURISDICTION (2004), *available at* http://www.gao.gov/new.items/d04297.pdf.

[246] *See supra* note 58 and accompanying text.

[247] *See supra* notes 78-94 and accompanying text.

[248] It is worth noting that the Alaska District, with its shorter survey form, reported the largest number of survey responses nationwide. *See* Appendix. Furthermore, one New Orleans District respondent urged: "Make this survey easier to read." *See* Appendix New Orleans District section.

[249] *See supra* Part IV.D.

[250] Between FY 1999 and FY 2006 the Corps' Regulatory Program budget increased from $106 million per year to $160 million per year. *Energy and Water Development, 1999 Appropriations*, Pub. L. No. 105-245, 112 Stat 1838, 1842 (Oct. 7, 1998); Energy and Water Development Appropriations Act of 2006, Pub. L. No. 109-103, 119 Stat. 2247, 2251 (Nov. 19, 2005); *see also Conference*, *supra* note 234.

[251] A number of districts are using online permit applications now, but increased usage is anticipated to expedite processing and save time with data entry. Telephone Interview with David Olson, U.S. Army Corps of Engineers (Mar. 15, 2007) [hereinafter Olson Interview]. Once the Operations and Maintenance Business Information Link (OMBIL) Regulatory Module, an automated information system to collect regulatory information and track regulatory actions including impact acreage, wetland type and acreages, and mitigation type and acreages, is up and running all districts will have access to on-line permit applications. *See* National Wetlands Mitigation Action Plan, *Initial Deployment of ORM*, http://www.mitigationactionplan.gov/OMBILdatabase.html (last visited Mar. 20, 2007).

[252] The "lead district" approach is directed at streamlining activities in states with more than one Corps district. Appointing a "lead" is designed to minimize conflicts and simplify applicant's confusion on regional issues (such as programmatic general permits). Olson Interview, *supra* note 250.

[253] Corps regulatory guidance letters can be found online at U.S. Army Corps of Engineers, *Regulatory Guidance Letters*, http://www.usace.army.mil/cw/cecwo/reg/rglsindx.htm (last visited Mar. 20, 2007).

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updated automated information system)[254] should be brought online as soon as possible.[255] Finally, because they are defined among the customer base, Corps district offices should seek regular input (through the existing survey or perhaps another instrument) from nonapplicant customers.

With respect to the protected resources themselves, these data likely demonstrate that too many permits are being issued too freely by the Corps. As the Corps' own statistics show, significantly less than 1% of permit applications are denied.[256] Though there are many opponents—some vocal—and many complaints about process timing, in the end it seems that not only do almost all those who seek a permit from the Corps end up getting one,[257] but the process of securing a permit is not all that bad.

Finally, with regard to both agency and judicial matters, what these data do show is that the rhetoric opposing the permitting program needs to be met with fact.[258] According to many of those who have experienced the process, applying for a permit from the Corps' Regulatory Program is not an overly burdensome event. Thus it seems the Corps is actually more "enlightened" (or at the very least, far less onerous) than Justice Scalia portrays.[259]

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[254] Olson Interview, *supra* note 250.

[255] Russell Kaiser from Corps Headquarters reports that

> [t]he Corps has several ongoing initiatives to expedite the processing of jurisdictional determinations and permit applications.
>
> First, the Corps has prepared a new form for documenting jurisdictional determinations. In addition to the form, the Corps has developed an instructional guidebook to facilitate determination practices and documentation requirements. Furthermore, the Corps HQ's will work with the Corps districts to reduce the learning curve and ensure an understanding of the program impacts resulting from the Rapanos decision.
>
> To further aid the decision-making process, several new Regulatory Guidance Letters (RGLs) are being prepared. One RGL will identify practices and documentation requirements to support jurisdictional determinations; another RGL will clarify the exemptions for irrigation and drainage ditches; yet another RGL will provide guidance on writing special conditions. Additional RGLs will be developed to support wetland delineations. Regional supplements are being prepared to supplement the 1987 Wetland Delineation manual. Finally, RGL 05-05 was developed to identify the physical indicators supporting an ordinary high water mark. Districts will be encouraged to publish requirements for jurisdictional determinations that would generally support the decision being made without a site visit.
>
> Additionally, ORM v2.0 will provide a streamlined, step by step process that will assist in the evaluation of jurisdiction. Embedded GIS resources will support timely reviews of aerial photography, topographic mapping, and existing national wetland inventories and will provide for quick references to jurisdictional determinations already conducted. Use of GIS and geo-location tools will support data populations of standard geographical location, such as State, County, watershed and drainage basins. Users will be able to document the nearest waterway and any large scale river network automatically by establishing the location of the project site. Users will identify the size and type of each aquatic resource on site and then document the jurisdiction or lack there of for each aquatic resource. The jurisdictional module of ORM v2.0 will be developed to include the required documentation for establishing or declining jurisdiction and will support electronic notification to the EPA and posting of the documentation on district web pages.

See Kaiser E-mail, *supra* note 21. In a telephone interview David Olson with the Corps' Regulatory Program Headquarters office also pointed to the new Nationwide Permitting Program as intended to increase efficiency by making those general permits easier to understand. Olson Interview, *supra* note 250. *See also* Reissuance of Nationwide Permits; Notice, 72 Fed. Reg. 11092 (Mar. 12, 2007), *available at* http://www.usace.army.mil/cw/cecwo/reg/nwp/nwp_2007_final.pdf (the "Corps proposal is intended to simplify the NWP program while continuing to provide environmental protection . . . ."). *Id.*

[256] The latest statistics available online are from FY 2002 and FY 2003. U.S. Army Corps of Engineers, *U.S. Army Corps of Engineers Regulatory Program*, http://www.usace.army.mil/inet/functions/cw/cecwo/reg/2003webcharts.pdf. They show that in 2002, there were 128 denials of the 81,302 permits applied for (0.16%), and in 2003, there were 299 denials of the 86,177 (0.35%) permits applied for. This means that in those two years an average of 0.25% of permits applied for were denied.

[257] In fact, in describing the low number of permit denials, the Corps itself states that "only 1% denied because projects made permittable thru avoidance, minimization and compensation." *See* Kaiser E-mail, *supra* note 21.

[258] For an interesting discussion about the power (and dangers) of rhetoric, see Marcilynn A. Burke, *Much Ado About Nothing:* Kelo v. City of New London, Babbitt v. Sweet Home, *and Other Tales From the Supreme Court*, 75 U. CINN. L. REV. 101 (2006).

[259] Rapanos v. United States, 126 S. Ct. 2208, 2214, 36 ELR 20116 (2006).

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Appendix
Compiled Survey Responses Including "Overall" Satisfaction Rankings and Compiled Comments of Customers

Alaska

984 survey responses reported.

Rating of 1: 16 (2%)
Rating of 2: 19 (2%)
Rating of 3: 130 (13%)
Rating of 4: 396 (40%)
Rating of 5: 352 (36%)
Rating of N/A: 71 (7%)

- "I have had 4 or 5 previous wetland issues with the Fairbanks office and have always been happy with the process and the people, especially (Corps employee)."
- "Service at Fairbanks office is excellent."
- "Thanks to (Corps employee)'s prompt attention to our need."
- "I found the staff to be highly efficient, professional, and knowledgeable. It is one of the best government agencies I have worked with."
- "Thank you (Corps employee)!"
- "(Corps employee) was a pleasure to work with."
- "Call backs take a couple of days. I assume you are very busy. Thanks. Your staff is always able to help."
- "No consistency!"
- "(Corps employee) was one contact person—everything handled very professionally."
- "(Corps employee) was very responsive, understanding of issues on this project. She should be commended for taking over a project that started at least 5 years prior to her arrival and then responding in a timely manner."
- "Kudos to (Corps employee) for all his help!"
- "Good job guys. Keep up a good work."
- "I have never had this fast of response time from any Federal Agency. Thanks, (Corps employee)."
- "Our USACE contact, (Corps employee) was extremely helpful in identifying the best permit for our project, and in expediting the permit issuance process. Please extend our appreciation."
- "I would like to thank (Corps employee) for working so fast for me. Thank you so much."
- "DEC should not be allowed to charge $500 for a piece of paper stating they "looked" at the project! It wasn't even insurance in case of accidental environmental damage. It was highway robbery!"
- "Thanks for help."
- "Keep up the good work."
- "(Corps employee) quickly responded to my request for a JD, verbally, and quickly responded to my written request."
- "Both (Corps employee) and (Corps employee) were very courteous and helpful."
- "(Corps employee) is most cooperative, helpful and is a credit to the Corps of Engineers."
- "(Corps employee) has been extremely helpful both in obtaining our building permit and in granting us an extension."
- "All personnel have been courteous and efficient."
- "Thanks to (Corps employee) for his expeditious assistance."
- "Thank you for all your help."
- "Very pleased with service I received."
- "Just wanted you to know I appreciate your work."
- "(Corps employee) was effective in resolving environmental issues without the need to heap on a pile of bureaucracy."
- "The issue of timeliness resulted from personnel changes within the Corps. Once (Corps employee) was assigned, he expedited our application in a satisfactory time."
- "(Corps employee) is an effective Corps representative who participates in projects as a team member."
- "Thanks for prompt turn around."
- "Written information hard to understand. Requested info that had several answers. (not one clear answer to one clear question). After I proved my point, your project manager helped out. The charts had more than one answer. Process could be made easier for everyone involved!"
- "You folks are getting faster all the time. Thanks, (Corps employee)."
- "We had exceptional help and assistance from (Corps employee)."
- "Would be helpful to have offices off military base. Corps should be removed from department of Army."
- "(Corps employee) and (Corps employee) extremely helpful!"
- "Keep up the good work. Thank you and your staff for being very helpful."
- "Thanks."
- "Thanks."
- "The employees were very helpful and nice. Thank you."
- "Thanks."
- "Thanks again."
- "It is important to respond in a timely fashion to communities requests in regards to their environmental reviews and assist them to be in compliance with regulations with their projects. I've worked with your agency in the past and have been satisfied with your assistance. Keep up the good work."
- "Thank you, (Corps employee)!"
- "Telephone calls were not returned promptly. Travel by the COE project manager stopped process of application numerous times. The project manager was extremely knowledgeable and experienced on several aspects of the project; however, she was unwilling to defer to experts on unfamiliar aspects. Comments accepted after the public comment deadline were also weighted heavily. All conversations between the project manager and agency reviewers should be made public."
- "Requests for additional information were numerous and cumbersome. The instruction for what is required for a project should be clearly spelled out. This may help limit the discrepancies between what different project managers require. Travel by the project manager delayed the permit process."
- "I heard that you are opening an office down here on the Kenai Pen. Is this true? If this is going to be my contact, could someone please contact me at the address or phone number below? Thank you, (Corps employee)."
- "The COE staff is generally very helpful."
- "Our experience with the Corps has been courteous and professional."
- "(Corps employee) is a nice addition to the regulatory program."
- "(Corps employee) helped me in a very timely manner!"
- "(Corps employees) have been super to work with. All have been knowledgeable, responsive, and easy to work with."
- "(Corps employee) has been great to work with-clear with instructions and expectations, the process, etc., and has followed through with his J.D., additional information, etc. Can't think of any desired improvements at this time-hence, scores of '5' above."
- "Follow up from initial submittal was very fast-and very much appreciated. (Corps employee) was particularly helpful and knowledgeable."
- "Very good attitude much better than in past years."
- "In past years (8-10 years) the Corps were really nasty to deal with. There has been a complete attitude change."
- "Thank you for helping me to achieve this quest. This can sometimes be very confusing! (Corps employee) in your office almost made it an enjoyable experience."
- "Thanks to (Corps employee) for working our NW request."
- "Prompt and professional service-good job."
- "Very helpful and timely."
- "(Corps employee) should be commended for his excellent assistance in permitting."
- "Keep on with good relations."
- "(Corps employee) was extremely helpful processing our IP,

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and quite understanding of short construction seasons in a remote areas."

- "(Corps employee) was very helpful getting a permit mod."
- "I have always been pleased with the service, courtesy, and timely response your people. Thank you!"
- "Very prompt responses on all inquiries."
- "I was impressed by the response I got."
- "My situation and questions were handled in a very professional and considerate way by a (Corps employee) in the Kenai Office. This is something your customers have come to not expect from most governmental agencies…Thanks!"
- "Thank you!"
- "(Corps employee) was very helpful and worked with us to address our concerns, as well as the resource agency concerns and come up with permit stipulations we could all agree upon."
- "I appreciate the diligence of (Corps employee) and her efforts to expedite the process."
- "Corps project manager dealt with application in a professional manner. (Corps employee) responded to questions in a timely manner. We are very satisfied with the Corps service."
- "The permit process went smoothly and was very effective."
- "Faxes sent were delivered to the wrong person or 'lost' in your office. Project manager implied it was our problem when it wasn't. The Corp' interpretation of whether or not a NWP was applicable varied between regulatory specialists. Customer satisfaction would be improved by consistent (and more liheral) interpretation of NWP criteria."
- "Your office was very prompt and kept us informed of the process."
- "Keep the great work."
- "Why make the applying individuals reduce their project plans from 11x17 to 8 1/2X11? Standard plan sets are 11x17."
- "The toll free numbers saved us time and money. On a scale of 5 and 1, your Regulatory Specialist, (Corps employee), deserved a 6!"
- "(Corps employee) is an outstanding individual to work with. He is the Sandy Koufax of Bureaucrats."
- "Thank you for your help in permitting my NWP process."
- "Thanks—Once I got a hold of the right person you guys did good."
- "The process is too slow and too restrictive."
- "Office personnel were very helpful-Special thanks to (Corps employee)."
- "Thanks."
- "(Corps employee) was extremely helpful with information that we could use to determine the timing of our project."
- "Helpful. On one project I think an NWP was appropriate, but it didn't hold things up. Overall good service. Thanks."
- "(Corps employee) is always a pleasure to do business with."
- "Thanks for your wisdom and help!"
- "Everything was done in a timely/professional manner."
- "(Corps employee) is by far the best person I have *ever* had the pleasure of dealing with any government agency!"
- "Very professional, easy to understand and accomplish what was required for permit."
- "As a government agency, you could have anticipated a 5¢ postage hike."
- "I think most of the problems were tied to my 'ignorance' of the process. COE PM was accommodating, timely and helpful. State entities are well coordinated, but tend to wait until the last minute to provide details of concern for applicant."
- "The wetlands program seems to have questionable need in Alaska where wetlands are not in questionable quantity. Thanks to (Corps employee) for a rapid processing my permit request."
- "(Corps employee) was helpful and efficient in processing this permit modification. Requirements were clearly explained and responses were prompt."
- "I have worked with (Corps employee) on two separate occasions and found him to be extremely helpful and responsive to questions and concerns."
- "The Corps officials I have dealt with have been consistently gracious and helpful which I greatly appreciate!"
- "Thank you, (Corps employee)!"
- "(Corps employee) is great to work with. (Corps employee) is not good to work with."
- "I was not aware the USACE was involved in my renewal of the walkway on our Kenai River Lot. But thank you for your concern."
- "Your personnel were very helpful. They helped all they could. The regulations are cumbersome—expensive to meet and ridiculous in a state like Alaska where every thing is classified wetlands."
- "Your timely responses and courteous services made our construction process easier and better for our customers. Thank you for your time."
- "I want to especially commend (Corps employee) for responding to my phone calls and permit request so expeditiously and effectively. Excellent work! Thanks."
- "Too picky applications. Too extreme permit all wetlands especially those with trees."
- "I appreciate your prompt phone calls with the letter follow-up. Thank you."
- "Regulations are hard to understand. Could be made easier to read."
- "In addition to (Corps employee) talking excellent case of our emergency situations and keeping me informed, (Corps employee) also stayed later when released early for snow so I could pick up the correspondence. Great folks!"
- "(Corps employee) represents the Army Corps in a cooperative, firm manner. We appreciate his term approach."
- "Thank you for a "speedy" courteous service."
- "It seems hard to enforce regulation to protect wetland when the owner is not in agreement with the need to leave wetlands. Is there any way that concerned adjacent property owners can help?"
- "(Corps employee) was responsive, informative and helpful, as usual. It is a pleasure to do business with the COE. Thanks again."
- "You guys do good work. I wish all agencies were this easy to work with. Thanks particularly to your timely responses. Few things will hurt a project like having your permits sitting on somebody's desk for months on end. Also thanks (Corps employee) cool grandsons."
- "Great service!"
- "It was a real pleasure working with (Corps employee). He was friendly, knowledgeable, and courteous. But most importantly he gave me accurate information which allowed me to move forward with a minimum of backtracking."
- "Non-permitting agencies should not be allowed to kill or needlessly delay necessary projects."
- "(Corps employee) treated me more like a friend and neighhor and really helped me expedite my needs. Thanks a lot!"
- "(Corps employee) responsive and thorough-a good combination."
- "I work with permitting agents at the COE very often and have been quite pleased with the services provided."
- "I think the Clean Water Act should recognize several classes of wetlands. Marsh and riparian areas would be high valued and most muskeg would he low valued."
- "(Corps employee) has been extremely responsive and helpful to me and to my employer. I am learning a lot from (Corps employee) about the COE program. Sincerely."
- "For this application I dealt with (Corps employee) and she was very prompt in returning any phone calls. (Corps employee) is very helpful and pleasant to work with."
- "I have not always gotten the ruling I wanted but the Alaska District has always been fair about their ruling."
- "The personnel at the Kenai AK office was very helpful. What a relief to work with such fine people!"
- "It was pleasure doing business with the Corp."
- "A big thank you to (Corps employee)!"
- "They are very helpful."
- "Very good job."

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- "Thank you for all the fine work you do."
- "(Corps employee) was extremely helpful in providing a jurisdictional determination in a prompt manner. Her assistance is always greatly appreciated."
- "Very prompt response to our request."
- "Any dealings I have had with the Corp of Engineers now and in the past have been very positive and helpful. Thank you."
- "Permit time extension-Thanks to (Corps employee) for their timely processing of this request."
- "Permit application was processed in a timely fashion; (Corps employee) was very professional. Thanks."
- "Thank you (Corps employee), your assistance was appreciated."
- "Thank you for the guidance in making my application."
- "Staff was not only courteous, but also very professional. Thanks."
- "Excellent customer service. Excellent follow-up."
- "(Corps employee) was very helpful in conducting a site visit to determine if jurisdictional wetlands would be impacted and in the issuance of the required authorization."
- "It would be great if you had a web page that showed known, delineated wetlands. I realize you haven't mapped the whole state, but the mapping would cover more areas as the years went by."
- "(Corps employee) was very responsive and helpful in working on our project-I have a very positive impression of the people I've worked with from your office."
- "(Corps employee) was excellent in providing assistance."
- "(Corps employee) has been a pleasure to work with!" We do business with many state and federal agencies and the Corps has by far communicated most clearly and in a most timely fashion. Thank you."
- "Do not like to have to get permit, but also know that some people would create hazardous conditions if it were not for the Corps."
- "I want to express my thanks for a pleasant experience with the regulation department. (Corps employee) was prompt and courteous in responding to my evacuation request."
- "Thank you so much for the help in the right direction."
- "Thank you for your help."
- "Thank you for all of your help in our permit process. All of your staff was a pleasure to work with."
- "I have dealt with two Corp employees. They were great! Both went out of their way to help me through difficult areas of the permit process. Polite, courteous, helpful, personable, efficient…describe these two men."
- "The Kenai field office responded promptly to the delineation submitted to their office and scheduled a convenient time for a field confirmation."
- "Good job."
- "I would personally like to thank (Corps employee) for being so helpful. Could you please send me a certification letter to sign when the work is complete? I didn't get one with my authorization letter. Thanks."
- "Application process easy to follow and complete."
- "(Corps employee) was very helpful and easy to work with. Give him a raise. Thank you."
- "Thanks again, folks and keep up the good work."
- "I was treated courteously by all parties, but apparently someone lost my paperwork and I had to do a follow up to get assistance."
- "(Corps employee) was very professional and courteous. I look forward to future business dealings provided I am treated the same way I was on this matter."
- "(Corps employee) has been very helpful and he is always courteous and we get answers in a timely manner."
- "(Corps employee) was very professional and processed my application in a timely and professional manner."
- "(Corps employee) was very professional and processed my application in a timely and professional manner."
- "Thank you for the prompt attention."
- "My opinion at the regulatory program has to do with over-zealous regulation, not with regard to the very positive and helpful service I received from the local Corps office."
- "We at the [other federal agency] would like you to now how much we appreciate the timely response in processing applications. The rapid processing at permit insured the success if a project with an impossible schedule. Thank you so much and keep up the great work."
- "(Corps employee) is one of the best persons I have worked with over 30 years of involvements."
- "Thank you."
- "(Corps employee) was very courteous and responsive. Also, his visit to the office was very helpful and sped the COE evaluation along. Thanks!"
- "(Corps employee) was very helpful and easy to work with."
- "(Corps employee) is very helpful and responsive."
- "Generally the ACOE regulatory programs are relatively easy to work with. ACOE staff tell it like it is and stay true to what they say."
- "Process was smooth and professional."
- "Original contact person supplied all the necessary information to apply. Thanks."
- "The project manager (Corps employee) was the most straight forward and helpful government employee I have ever dealt with in 30 years."
- "(Corps employee) was a true pleasure to work with and extremely timely and efficient."
- "Thanks."
- "Toll-free number was great, but was still difficult to contact individual I needed to speak to."
- "Thank you, didn't know about the 1-800 number."
- "Any on-base contact is nearly impossible as is hand delivery if time critical materials."
- "I appreciate (Corps employee) keeping us updated on the progress at our application."
- "Keep up the good work and timeliness."
- "I will check out the web page. Thanks."
- "(Corps employee) was extremely helpful and provided decisions in a timely manner."
- "Everything worked well."
- "(Corps employee) was tremendously helpful. Our process went very smoothly."
- "(Corps employees) have all helped on my projects. I have received excellent help all the way through the process."
- "The Corps people are very good to work with."
- "Thanks so much for getting all these permits together for the project on [location]."
- "(Corps employees) were extremely helpful."
- "The project manager responded promptly in spite of the load of work he had to do. That's good."
- "I would like to thank (Corps employee) for acting in a timely manner. Thanks."
- "(Corps employee) was great!"
- "Thank you for your help in this matter."
- "All of us really appreciate your quick response on this project."
- "(Corps employee) is great to work with."
- "The Corp has always been prompt in responding and helpful when resolving issues."
- "Wow! That was quick. Thank you folks and until next time, take care."
- "Anchorage office referred me to Kenai office, but Kenai office does not include Anchor Project. Kenai office very helpful though."
- "Thanks for the prompt response!"
- "Thank you for indeed being courteous and timely response. It is greatly appreciated."
- "Are you kidding? Who would want more involvement from you?"
- "I would like to see the COE take on a leadership role rather than be dictated to by the various resource agencies."
- "Very helpful-cooperative!"

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- "(Corps employee) has been great to work with. He walked me through some pretty complex issues and instructions."
- "Every conduct I had with the Corps was pleasant, informative, and helpful. Even expedient when I received emergency approval."
- "(Corps employee)–very courteous and quick to resolution at!"
- "I think it all was done very well. The problems were few and mainly due to my inexperience in the program."
- "The Corps is a straight forward and timely permitting agency. My experience dealing with you has always been positive."
- "Approval of our dredge permit depended on coordination with USFWS "endangered species" office-that part took way too long. I leave that to COE how to expedite coordination process. Our request did 22 Oct, and your answer did 4 February."
- "I appreciate the fast, professional, friendly service. Thank you!"
- "(Corps employee) was very pleasant to work with."
- "(Corps employee) was exceptional!"
- "Would have rated the web page higher if it had been easier to determine whether I needed a Sect. R permit and been able to get an electric copy (found elsewhere on web). My appreciation to (Corps employee), Flocks office for stepping in and doing a superb job helping me out."
- "(Corps employee) out of the Anchorage office was first class in his application and timeliness in helping me with procedures."
- "Thank you, (Corps employee)!"
- "I worked with two people, the first person I dealt with did not do as good of a job clearly explaining things to me. The second person I dealt with cleared up many misunderstandings I had."
- "Thank you for reviewing APMN (number). This is my first contact with Corps of Engineers."
- "1) Corps was somewhat slow to respond to our letter and 2) Corps office on base is difficult to visit."
- "I wasn't given the 800 number. I called long distance each time I called. Make the number available to people living outside."
- "The process worked well. Requests for info and additional detail were reasonable. The project manager was courteous and prompt."
- "Big thanks to (Corps employee) for keeping everyone on track."
- "(Corps employee) is always professional and helpful!"
- "Always enjoy working with staff at this office."
- "(Corps employee) assisted me, and was courteous, prompt and expedient. Thank you for your help."
- "Very quick service, very pleasant."
- "Website is generally very slow."
- "Thanks to (Corps employee) for his help."
- "Process was clear. Responses were timely. Thanks."
- "All worked out OK."
- "Special conditions requiring restrictions on pile driving are excessive for over specific area and construction. The Corps should require other agencies to address specific sites and construction rather than accepting very conservative, generalized restriction to construction. These restrictions will add significant cost to our projects."
- "Good service."
- "Thank you for the quick response to my letter."
- "This being my first time working with the "Corps." I was surprisingly impressed with the help and timely fashion my request was processed. I wish all government agencies were like yours."
- "[Applicant] forwarded our application for an addition to our home which is in a flood plain area to your office to secure permits. We were told initially to plan on a 30 day timeframe for permits. Service was prompt and we had our required information in approximately 10 days."
- "Staff, particularly (Corps employee) is very good to work with."
- "This was my first experience with the Corp of Engineers, and I have to say I was impressed for the response to my question. Thanks."
- "The Corps has always been very helpful, and easy to work with."
- "Great, efficient service!"
- "More thanks to (Corps employee) for his assistance."
- "(Corps employee) was very helpful and a pleasure to work with. Thank you!"
- "Thank you, (Corps employee)!"
- "Very prompt and professional service provided-I had the sense that the COE is responsive to project driven timing needs-much appreciated."
- "This is all new to me. But I have found that everyone I have come into contact with to be very helpful and courteous."
- "Since I have not been to your office, I could not determine an answer."
- "Both (Corps employee) and (Corps employee) were very helpful. It was a pleasure working with them."
- "The receptionist at the 1-800 number was not helpful. I was put a hold twice for over ten minutes while she tried to connect me."
- "Good job!"
- "(Corps employee) is always, courteous and helpful!! Thank you."
- "Very impressed with the professionalism."
- "Thank you for your time and speedy response."
- "(Corps employee) is very helpful, knowledgeable and courteous."
- "Appreciate the quick service but am concerned about the Corp spending resources on a homeowner's 1 acre building lot."
- "Courteous, quick response."
- "Regarding the first question, the Army COE in Alaska needs better wetland info-the NWI maps have very limited use, but I'm sure you deal with this everyday!"
- "Keep up your good work-Working with each and every individual has been a pleasure and productive."
- "I've always found the Corps staff very helpful and constructive."
- "Keep up the good work!"
- "It took almost two years to administer a simple permit. This worries me about more complex projects, but I'm glad a system of some sort exists."
- "Thank you, (Corps employee)!"
- "(Corps employee) was very helpful and professional."
- "I dealt with (Corps employee) who was very prompt and clear about what additional information she needed."
- "As always, it was a pleasure working with (Corps employee). He is extremely knowledgeable and responsive, and is a credit to the Corps."
- "(Corps employee) was responsive and helpful."
- "Thanks to (Corps employee) for prompt action."
- "Worked with (Corps employee) and (Corps employee) this time. Outstanding employees, very satisfactory experience. Thank you both!"
- "Good job! Job was done."
- "Keep up the good work, continue to assist us on our goal for our community."
- "Thanks to (Corps employee) for working on such a protracted review process for [project]."
- "As with previous experience, the timeliness and ease of obtaining Corps services ranks high. Thanks."
- "Since this is my first time I've contacted Army Corps of Engineers, I could not and can not determine where the organization stands as far as service or response rendered at this time. The tribal members of [tribe] could be able to answer more accurately than I can."
- "Just received on 6-14-02 as was mailed to property physical address of which we have no mail delivery-only P.O. Box."
- "(Corps employee) provided to me excellent service including working late after training to ensure my needs were met. Thanks."
- "Both (Corps employee) and (Corps employee) were extremely responsive and very easy to work with. They both get kudos from [applicant]-Thanks!"
- "(Corps employee) is an exceptional individual and representative of the Corps. He is able to equitably weigh the value of the environment and development within standards and guidelines."
- "Only your Kenai office answered the phone. The others put me

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on that dammed voice mail system. Please can you improve in that area?"

- "This was a difficult permit due to state agency comments and state permitting delays. (Corps employee) was excellent to deal with throughout the arduous process."
- "Your permit process was a great surprise for us. Very helpful and caring. Nothing like we have in Washington State."
- "You realize I applied for permit consideration during May of 2002."
- "I think the lack of wetland designation in locations along the [particular] River is detrimental to the protecting riparian habitat and fishery protection from development impacts."
- "Response from (Corps employee) was excellent. I was able to work with her on ACMP coordination."
- "Personnel really trying to cooperate is maintaining the purpose of wetland regulation when Nixon was here. He was a jerk. Though he was god. Set this office back 5 years."
- "The Juneau office is well run!!!"
- "(Corps employee) has been an excellent helper. He is a good understanding man towards the bush villages."
- "I found your agency's project manager (Corps employee) to be very helpful in the permitting process, and prompt in responding to my queries, and application."
- "I realize the "...needs met in a timely fashion" reflect your workload. Good luck with future staff levels. The project manager was very courteous."
- "Wetland determination seems to vary with region- i.e., Anchorage vs. Fairbanks. SWANNC case is not clear on where it applies and what is used to evaluate cases. If vegetation, wild fowl do not apply but commercial use and situated soils do?"
- "I had to wait for permit to do Kenai River Bank Restoration and it was faxed to save time. Thanks!"
- "Fast, courteous transaction."
- "Correspondence was timely and professional. It is super to call a governmental agency and hear a live person answering the phone. Additionally, our project manager was easy to contact. When not available, he was prompt in returning calls. The entire handling of our permit and application has been professional. Thanks. First contacts were with (Corps employee). Also have had contact with (Corps employee)."
- "I have been happy with the service I received! Thank you for your help."
- "Very courteous and helpful people as well as friendly didn't present a bureaucratic front."
- "(Corps employee)'s office personnel was timely and profession. We appreciate their effort!!"
- "While going into the web site, I was unable to read the documents. I want to read as I couldn't find it-Nationwide permits. When I tried to open the file for read only, it never came up?"
- "This particular permit came through faster than any one I have even applied for before. Thanks for all the help!"
- "(Corps employee) was very professional and helpful."
- "Thank you, (Corps employee)!"
- "Very timely response from (Corps employee). Thanks!"
- "Thank you, (Corps employee)!"
- "(Corps employee) and (Corps employee) were very helpful in explaining the regulatory process for the department of the Army permit applications. Very friendly in all their interactions. Kudos to both."
- "All the folks I have worked with at ACOE permitting have been outstanding. Seriously, this includes (Corps employees)."
- "I was pleasantly surprised with the timely response and completion of this project. On the phone your office was very friendly and helpful. Thanks so much!"
- "Thank you!"
- "Everyone in the process was professional, courteous, and efficient. I was most impressed. Keep up the great work."
- "My request was addressed in a professional manner. I received approval in a timely manner. Thanks."
- "It would be great if Petersburg permits were handled through your Juneau office. It would be easier to stop in the office to discuss plans and the regulatory program."
- "Once we realized what we were up against and could express our needs to the Corps, you came through to expedite your processes. The process was very confusing as a Federal agency making application because there appears to be a lot of duplication of effort. It was difficult to understand the types of permits available and what was needed to acquire a permit."
- "(Corps employee) was great to work with."
- "CWA in Alaska should exempt wetland impacts to residential properties up to 5 acres. Too much effort put in designation wetlands when nearly all wetlands are low value and in excessive quantities."
- "This is the second permit in a row that I have received with at a return envelop in it."
- "Process was quick and easy. Thanks."
- "(Corps employee) was very professional and helpful. I did not feel like I was dealing with a not compassionate government agency."
- "I found staff in Kenai office to be very courteous and helpful. Pleasant to deal with. Thank you."
- "(Corps employee) has been very helpful."
- "For a federal agency, the ease of processing paperwork was painless."
- "This District does an excellent job. I have always been treated like family, with respect to helpfulness. (Corps employee) and (Corps employee) are outstanding employees. Thanks."
- "Thanks."
- "(Corps employee) was very friendly helpful (Kenai office)."
- "I wasn't all that timely myself."
- "Thank you."
- "This request for a Nationwide Permit was processed in a prompt manner that will help us in planning the work schedule. The project manager (Corps employee) was very helpful and recognized the constraints we were working with to accomplish the project."
- "Thanks for all your help!"
- "Very rapid response to my inquiry. Thank you."
- "Great job. Thanks-timely."
- "It is always a pleasure to go through the permitting process in Alaska. Everyone is very helpful. I just wish this attitude culture in Alaska was in the Seattle office also. Difference of ninety days between the two districts."
- "I and we appreciate your timely service."
- "I would like to complement (Corps employee) for professional, courteous, timely and informative help. If you find more like her, hire them! Also (Corps employee) was very helpful in expediting permit."
- "Project manager (Corps employee) was very helpful and responsive. Thanks for your terrific efforts!"
- "(Corps employee) was excellent to work with. She was very responsive, even during times of personal distress."
- "(Corps employee) is an asset to your organization!"
- "Our project manager, (Corps employee), has been very helpful and responsive to the applicants' inquiries throughout the permit process."
- "Appreciating the clarity of advice given."
- "The personnel that have been in Wrangell have been great."
- "I have found the Fairbanks District office to be very helpful in assisting our office with both technical matters (with regard to wetlands assessments) and in reviewing our submissions."
- "The Fairbanks office rocks! They deserve a larger, more impressive office. Every dealing I've had with the Fairbanks office staff has illustrated their professionalism and genuine helpfulness."
- "Appropriate concerns were raised by your agency and handled professionally."
- "I thought it might be a difficult process to get a permit for our work, but it was very straight forward and timely. Thank you."
- "Services were very courteously and helpfully delivered."
- "Thanks for the timely service."

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- "Application was not processed in a timely manner. All concerned agencies had no issues with application. USACE took 7 months to process this application."
- "Thanks for timely response."
- "We gave the Corps short notice. They reviewed our project within one week. Not only that, but we also received the answer we were hoping for! Thank you for the super, quick turnaround. Thanks especially to (Corps employee) and (Corps employee)."
- "(Corps employee) was extremely helpful. Although she was busy, she took the time to look up my information right away. She returned calls promptly and explained things in a way that was easy to understand. She deserves recognition for this!"
- "(Corps employee) was very helpful with prompt action."
- "(Corps employee) was very helpful in getting this permit."
- "I would like to commend and express my appreciation of and for the responsiveness of the Fairbanks office. Thank you, (Corps employee) for your performance-above and beyond the call."
- "(Corps employee), our project manager was extremely competent and responsive. His effort enabled us to submit a complete application which could be processed timely."
- "Great service and very short turn-around time for permit renewal. Thank you."
- "I am very pleased with the timely manner in which this permit was processed. And the willingness to help a private land owner through this large process, from your project managers."
- "There seems to be problems with resources available to do regulatory permitting. Too many supervisors and mid-level managers and not enough workers at the staff level."
- "I worked with (Corps employee). Questions and responses were very timely. Great service."
- "The buoys held by [a particular party]are dragging every year and then just left, causing damage and potential hazard. Please ask [that party] to set heavier anchors! It's a serious worry, and has already caused me great damages!"
- "Thanks for your service."
- "I used the Kenai people at the [particular] Association to contact you. They were okay after we decided on what I wanted done."
- "The fax that was sent was answered in a timely fashion."
- "I was very impressed with the response time on my request."
- "I am working with [consultant] and [client] and have, therefore, not had direct contact with Corps of Engineer personnel. Thank you."
- "I had no interaction with Corps. My application was sent by [consultant]."
- "I would like to thank (Corps employee) for his advice and assistance in getting my permit processed. He promptly returned my calls and kept the project moving."
- "(Corps employee) is great! A wonderful guy to work with!"
- "I can't comment on the other departments or program besides getting a jurisdictional information. I feel that getting a jurisdictional determination is a waste of time. Everybody always builds anyway. This delays the process."
- "Applying for jurisdictional determination is a waste of time, money and resources."
- "The Anchorage office and personnel have been extremely helpful with management of permit requirements. I appreciate the skills required for this responsibility."
- "Great working with you all."
- "All my questions were answered by the staff. I received very prompt and professional service. The staff was very helpful! Thanks."
- "(Corps employee) has been very helpful in identifying me information needs and explaining the process."
- "Good experience."
- "(Corps employee) was extremely helpful and help us with our permit quickly."
- "It would have been nice to have the 1-800 number and it would also be nice if there were less hoops for this type on land. The 30 pine trees are not quite wet lands."
- "Our project manager (Corps employee) was extremely helpful and professional."
- "If we had not had professional help, there is no way we would have figured out all the figures and regulations and what you needed for the permit."
- "Everyone I have dealt with has been very helpful and courteous. (Corps employee) is a very helpful person. I look forward to meeting him personally."
- "I appreciate the guidance and assistance provided to me by (Corps employee). She was very helpful during the acquisition of our DA permit. Thanks."
- "(Corps employee) was extremely helpful with out project."
- "I have had many dealings with the Regulatory program within the last two years and have found them to be extremely helpful in all respects."
- "Change of ownership, very helpful process."
- "(Corps employee) was exceptionally helpful in working with us to get him the information he needed to complete agency review and issue a very speedy Nationwide Permit for our small time constrained [particular] rehabilitation project. Thank you!"
- "(Corps employee) contacted me telephone. He was very helpful in getting my permit issued."
- "I was amazed that (Corps employee) would come to Homer to conduct his field investigation (6/11/05). This extra effort was greatly appreciated!"
- "(Corps employee) knows her job forward and backwards. The Corps of Engineers is very lucky to have her as an employee."
- "We found the staff in Fairbanks to be very helpful, courteous and friendly. They made it very easy to process what we needed. If you need any future comment, I would be happy to talk to them."
- "Thank you!"
- "This was a positive experience for all of us."
- "I am dedicated to do all that I can to preserve and maintain the health of this Kenai River. For 14 years of living on the River and we'll always do so."
- "Very informative and little bureaucracy. Easy to work with."
- "(Corps employee) was very helpful in leading me through the application process."
- "(Corps employee) was excellent to work with. He was courteous and timely and good in his explanations."
- "Good coordination and timely response."
- "Thank folks, Great job and have a wonderful summer."
- "Thank you for a timely evaluation."
- "Thank you for helping me. I would like information on buying the balk land to me and the Slough. Could you send me the information how to do this?"
- "(Corps employee) and (Corps employee) were both very helpful in developing a time critical solution for a remote project. Their timely and effective advice resulted in meeting a critical deadline."
- "Thank you!"
- "Thank you!"
- "(Corps employee) at your Regulatory branch at Elmendorf AFB did an excellent job at answering my questions as I homesteaded this land and was unfamiliar with what I had to do to meet your requirements. He answered my questions, gave me his private phone line for additional questions, reviewed my information and provided a filed inspection and letter with delineation within 3 weeks. I rate him on a scale of 5."
- "Thank you!"
- "Thanks so much for all the help. (Corps employee) was my contact and was wonderful to work with."
- "Overall, it is a pain to look and request J.D.'s. They seem rather pointless as we have so much land in Alaska. And must get approval anyway. Why bother?"
- "The USACE is a great resource for assisting our clients when wetlands our U.S. water issues arise. The USACE representatives have, in all cases, been extremely helpful."
- "I could not have asked for better help. (Corps employee) was completely helpful."

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- “Wish to extend praise for (Corps employee) in Juneau for his aid in a noncompliance matter”
- “[My co-applicant] and myself appreciate your prompt attention to our gravel pit permit [for our project] renewal. We will keep your office informed on the pit’s operation.”
- “[My co-applicants] and I appreciate your prompt attention to our requested inspection of the [#] acres that are [in specific location]. I am sure we will have other contacts with you on this parcel.”
- “(Corps employee) was extremely helpful and professional.”
- “(Corps employee) has been very helpful and seems like a nice guy.”
- “The regulatory branch in Fairbanks is very helpful and reasonable to work with.”
- “Thank you, (Corps employee).”
- “Very very fast turnaround. Thank you.”
- “Very fast processing /review of a construction project for our utility. Approximately one week turn around. Thank you for your prompt response.”
- “Very knowledgeable and comprehensive response letter.”
- “Very knowledgeable and comprehensive response letter.”
- “(Corps employee) was very helpful.”
- “Response to permit applications in past couple of years has been very quick. Thanks.”
- “(Corps employee) is extremely responsive, clear and concise. A pleasure to do business with.”
- “Thank you, (Corps employee).”
- “My project was greeted in a timely and professional manner.”
- “Keep up the good work.”
- “Looking forward to working with the Corps on my first project. Thanks.”
- “Comment attached to COE permit evaluation: ACOE personnel have expedited my permit and treated me courteously and professionally. I question the practicality of the CWA in Alaska where nearly all land is undeveloped and the greater majority of the land based is low productivity wetlands. Delineating, measuring, and accounting for impacts to wetlands in Alaska is a great waste of taxpayers’ dollars. I realize this problem is the result of congressional action, and can be modified only through congressional action. I would request that the ACOE recognize this problem and forward a recommendation to the congressional liaison in your office to streamline the permit application process for wetlands.”
- “I really enjoy working with (Corps employee). Her vast knowledge and guidance inspire my work everyday.”
- “(Corps employee) worked very hard to meet our timeline on this last minute minor modification. Very much appreciated!”
- “(Corps employee) does an outstanding job.”
- “Thank you for your help.”
- “Did a great job.”
- “Keep up the good work.”
- “I had a good experience with all experts of the permitting process.”
- “Always professional and courteous.”
- “Thanks.”
- “Building a subdivision and needed a Corp determination.”
- “This round of permits has gone very smoothly. I was pleasantly surprised. Thanks, (Corps employee)!”
- “Thanks.”
- “Thanks for the quick work.”
- “Our permit was handled quickly and professionally.”
- “Thanks for the quick work!”
- “Not visit office. Too lengthy time wise, especially due delay in State. Toll-free number not access Juneau office. Web page difficult to use.”
- “Very courteous, informative and helpful staff assisted my client and I in addressing the wetland issues associated with our project.”
- “Working with COE was easy and pleasant. Thank you.”
- “Website-unless you already know how to find the website it is frustratingly hard to find, especially if you start at the national website.”
- “Your agent, (Corps employee) is a credit to your office. If all the government office were run as well as your, we would be in a better world. She was fair, informative, fast and knew what she was doing. She deserves a raise, and promotion. Thank you for all your help.”
- “I have been very impressed with the speed and professionalism that our recent applications have been handled. Thanks.”
- “(Corps employee) is an experienced project manager with the ability to maintain project schedule while sorting through project issues from agencies and applicant.”
- “Everyone I spoke with was very helpful.”
- “(Corps employee) was very nice and I would encourage anyone from Homer to see her regarding their questions about wetlands.”
- “Make it easier to contact manager assigned to questions.”
- “Great program. Thanks for protecting Alaska waters and wetlands!”
- “Wetland delineation-Clarification of designation, determination of classification.”
- “I appreciate the timely response.”
- “Thank you, (Corps employee)!”
- “Thank you, (Corps employee)!”
- “Thank you, (Corps employee)!”
- “Thank you for all your help!”
- “It would still be nice to simplify the process for these residential, privately owned, muskeg “wetlands” lots here in Southeast, Petersburg area.”
- “It took 1 and a half years from application submittal to issuance of permit. Although it was a complex project, you seem quite under-staffed.”
- “I mainly dealt with (Corps employee). He was courteous, prompt, and very helpful. I made occasional contact with other staff and they were of the same caliher.”
- “(Corps employee) was extremely helpful, professional and timely. He was cooperative and understood and assisted us in the success of out project.”
- “I have permitted many projects and have been completely satisfied with the professionalism and timeliness the permit applications have been handled.”
- “Thank you for your quick response!”
- “John and staff are very helpful.”
- “Permit process information available on line password protected or not to comment/check via e-mail and save time on phone from both end.”
- “(Corps employee) did an excellent job. I hope if need be, I can work with her again. Thanks.”
- “Pleasure to work with this office. Thank you.”
- “The Fairbanks office was very helpful with the entire process.”
- “Thank you, (Corps employee)!”

Albuquerque

156 survey responses reported.

Rating of 1: 0%
Rating of 2: 0%
Rating of 3: 0%
Rating of 4: 20 (13%)
Rating of 5: 131 (84%)
Rating of N/A: 5 (3%)

- “All is satisfactory.”
- “I received better service than other offices.”
- “I had exceptionally pleasant and informative conversation concerning my last application. The Corps’ determination was received in a very reasonable length of time. Excellent response time!”
- “Your agency is a pleasure to work with.”
- “(Corps employee) was prompt, courteous, and highly professional in his response to our request.”
- “(Corps employee) was the best to work with!”

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- "The permit went very smoothly, and relatively quickly."
- "Service was exemplary."
- "(Corps employee) is exceptionally professional, and expedient. He has been willing to assist with any questions we have had, and has given good information. Many more like him would take the stigma away from govt bureaucracy."
- "We are grateful for the professionalism and helpfulness of everyone in your office."
- "(Corps employee) was most professional and helpful requiring conformance with the regulations."
- "Our agency appreciates the Corps of Engineers' timeliness and helpfulness on getting our proposed projects properly permitted."
- "(Corps employee's) quick attention and follow up was greatly appreciated."
- "Most landowners … do not have any awareness of the potential need to contact the Army CE when place stream crossings."
- "(Corps employee) is very helpful, providing necessary information concerning the Section 404 program."
- "I am very pleased with the progress made in the 404 program by the ACOE over the last 20 years."
- "(Corps employee) is a pleasure to work with. She is professional, efficient, and thorough. I find the 404 application itself to be so constraining as to limit useful information about the proposed project. Also, I recommend that you add to your Web site (or if this is already there, make it more obvious) a general timeline of the 404 application process and a process flowchart, including what contacts and decisions that may be made at various points."
- "Your office has been a pleasure to work with. Thank you."
- "(Corps employee) was extremely efficient and helpful."
- "You folks are doing a great job."
- "(Corps employee) has helped in resolving issues that would otherwise delay projects due to demands made by local authorities. His experience has given a higher level of the layman. More staff like him is desperately needed. We enjoy and look forward to doing business with him."
- "Your Pueblo office is great. Good service, good information, good to work with."
- "(Corps employee) was extremely helpful during the whole process starting from our pre-application meetings during which she provided us with clear direction in our attempt to comply with regulations. (Corps employee) responded promptly to phone calls and issued our permit in a very reasonable time frame."
- "(Corps employee) was outstanding!"
- "(Corps employee) was our contact and was outstanding to work with."
- "Courteous, professional, and attentive to both the customer and the project details."
- "You guys do a good job!"
- "The Pueblo office and in particular, (Corps employee), has always been extremely helpful and very responsive. Thank you as you break the stereotype of government organizations."
- "Many operators/people who fall under the regulations, e.g., construction companies, in our area are unaware of the 404 regulations. Cities, counties, and contractors should be targeted for education. Houston has started this and it should continue."
- "These people are fantastic—answers when we need them, and action—right-now-type action."
- "(Corps employee) was very informative—this is the first time I have dealt with (Corps employee)—it was a pleasure. I don't have suggestions at this time."
- "(Corps employee) was great to work with."
- "The spreadsheet we were required to fill out was somewhat confusing and was somewhat onerous for the environment involved. It was helpful and keeping track of the numerous gullies, etc."
- "Program hard to understand and jurisdictional issues are not well defined."
- "Very professional."
- "Get personality in Phoenix office personnel. I spoke to (Corps employee) on several occasions; the conversations seem to be fruitless. He doesn't appear to put the plans and descriptions … Therefore having our business bottleneck."
- "(Corps employee) was very helpful in meeting with us and answering our questions and working with us to help understand our project requirements."
- "(Corps employee) did an outstanding job of investigating my situation and getting back to me in record time. He was prompt and professional! Thank you (Corps employee) and Corps of Engineers. This man was one of the best professionals I have ever worked with."
- "Make the Internet more user friendly—e.g., downloadable permit form. (Corps employee) was very professional and helpful and timely—I appreciated his help."
- "Everyone at the Corps has been very kind and supportive—your Conchas people are tops!! (Corps employee) in Albuquerque office was also excellent in assisting in getting permit—very clear."
- "(Corps employee) was very helpful and responsive."
- "The agent responded with verbal approval by phone and a hardcopy within the time he said. Very responsive and easy to work with."
- "(Corps employee) worked with me on this. He was very helpful."
- "Please consider making the regulatory program more usable on your Web page."
- "We thank (Corps employee) and the Pueblo office for expediting this permit."
- "Everyone that I met at the Corps has been very helpful."
- "(Corps employee) is knowledgeable, courteous, and efficient; staff support not on same prompt schedule. This front line operation is a key public interface for the Corps and needs proper staff and staff support to maintain high level of expertise and quick turnaround."
- "(Corps employee) was great. Very helpful and clear. I appreciate her help and the service she provided."
- "Out of all the government agencies and departments our company deals with, the regulatory offices in Littleton and Durango have been the most useful and courteous."
- "More outreach and education about the permit program. Didn't like the way the Corps has backed off on permits for [particular watersheds] due to losing a Supreme Court decision on a sand and gravel quarry; don't see how they relate."
- "Very responsive. (Corps employee) has been excellent to deal with. He is very articulate and willing to explain."
- "Excellent response. Good job."
- "I thought that (Corps employee) and the Albeq. staff were very reasonable, courteous, and professional during this permitting process."
- "His response was immediate and thorough. He was very helpful in answering additional questions. He is always courteous."

Baltimore

1 survey response reported.

Rating of 1: 0 (0%)
Rating of 2: 1 (100%)
Rating of 3: 0 (0%)
Rating of 4: 0 (0%)
Rating of 5: 0 (0%)
Rating of N/A: 0 (0%)

- "The Regulatory Staff is courteous and professional. However, the turn around time on permit applications is incredibly slow, resulting in project delays."

Buffalo

Reported that it has no surveys.

N/A.

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Charleston

96 survey responses reported.
·Rating of 1: 5 (5%)
·Rating of 2: 9 (9%)
·Rating of 3: 9 (9%)
·Rating of 4: 23 (24%)
·Rating of 5: 45 (47%)
·Rating of N/A: 5 (7%)

- Took a little too long
- We received excellent service from the Project Manager; Questions were answered expeditiously; Project Manager was highly complimented for his service.
- Weren't happy with amount of time to receive a permit should not have had to hire [consultant] to obtain permit dealt with too many different people w/ Corps. Too much red tape.
- Hire more people and require field experience even for non field personnel
- More qualified project managers
- Pain in the A**
- This permit was filed for on Octoher 22, 2005. After an understandable 2 week delay while Archives and History assessed the project, [Archives and History staff members] each wrote letters, Feh. 19th and Feb 28th respectively, stating that their office had decided there would be no adverse effects from the project. Four months later, still no further word on the project. On June 27 I inquired and was told by [Corps employee] that the holdup was Archives and History. I immediately faxed him my copies of the February letters. Three weeks later I was told the permit is in a pile waiting for processing. Finally today July 31 I received this package. I had tried to be patient – it's a good thing I called and the hold up was discovered. Four months in limbo is frustrating. It would seem that there should be some better way to monitor the progress of a permit – especially when 2 letters from 2 different people written on 2 different dates never made it into my file.
- [Corps employee] reviewed, visited & responded to the needs of my project (two projects) in a timely and professional manner. He is a welcome addition to the Columbia office.
- [Corps employee] provided outstanding service during the course of our project. His efforts are significantly improving the COE's regulatory program in Watershed Group 6.
- The lag between Nationwide Permits expiring and replacements being authorized is unacceptable.
- [Corps employee] is very nice, professional & never fails to return our phone calls. She processes our requests in a timely fashion and is always very clear about any additional info she may need.
- Process is entirely too slow.
- [Corps employee] has handled our JD req. and permit applications in a professional, through and timely manner.
- [Corps employee] entirely too long to complete what should have been a simple process. He rarely returned calls and was generally evasive. Very poor service!
- [Corps employee] moved our NWP39 through the process in a timely fashion, promptly returned our phone calls and was always very friendly.
- am complaining about a permit application initially submitted in 2003 it has had four different project managers & it still hasn't been issued.
- Slower and getting slower. Streamline permitting process hy placing deadline on commenting and review periods of 90 days.
- [Corps employee] is unorganized, indecisive and as a result: SLOW!
- [Corps employee] continues to do an excellent job in all respects for the COE Regulatory Program. He is thorough, fair & professional at all times. He even completes his actions in a reasonable amount of time, which is typically not the case of other project managers.
- Process took almost a year to get a permit to replace a dock – We got the runaround from DHEC to Corp to State. Property owners should be given detail instructions of procedures & easy to follow checklist of names of folks to contact.
- All of the guys in Columbia have been very responsive and timely in such responses. I consider it a pleasure to work with these individuals and they all have always been very accommodating. I enjoy working with the Columbia office, and only wish all agency responses were as timely! Exemplary performance – keep it up.
- [Corps employee] is not efficient, particularly in processing permits in a timely manner. Six to nine months may be reasonable for Individual Permits, but NWPs should not take as long.
- Just a comment about the service received from [Corps employee]. He provided me with excellent information and suggestions in a timely manner and made our permit process progress smoothly.
- It is clear there is a shortage of personnel to cover the state of SC – I think the Corps does a remarkable job given the lack of Congressional support for the program.
- [Corps employee] acted on this NWP-PCN in a very professional, courteous and timely manner.
- Permitting for residential subdivisions should not include on site mitigation (Preservation/Buffering). I am sure, as you are aware, homeowners regularly destroy upland buffers. It is my opinion (for what it is worth) that mitigation for residential sites should be required to come from an approved mitigation bank.
- [Corps employee] and his assistant arrived early at the proposed pond site and I was late. They spent every minute thoroughly evaluating the area. I am very impressed with how friendly and responsive they were to my questions. I want to invite them back once the pond is built.
- It took 2 years for a jurisdictional determination of the wetlands on my ten-acre lot.
- [Corps employee] is very slow! He just doesn't seem organized, and though he was always nice when we spoke on the phone, I had a difficult time getting him on the phone or getting what he had promised…
- It is always a pleasure dealing with [Corps employee], extremely professional and always has a smile on her face, which is something we should all strive for. I look forward to working with [Corps employee] in the future.
- I was quite impressed with [Corps employee]. She was very helpful, direct and timely in her responses. and provided or addressed issues quite well. She is an asset to your office.
- It took three months to get a wetland determination for a 0.14-acre urban lot. When I followed up via email to [email address] after two months, I received no reply. After calling, I finally received a response, but could not get any info re when the determination was likely to be complete. Perhaps the Corps could send out a postcard or email acknowledgement receipt of info and a timeframe for potential completion.
- [Corps employee] is very knowledgeable, friendly, and he expedited our request in a timely fashion.
- [Corps employee] has always performed her duties in a professional manner. She has never lost any of our projects & always responds in a timely manner. Thanks.
- Excellent response time. Helpful. Overall great experience.
- [Corps employee] failed to return my phone calls, seemed confused when we did talk, and lied to me! I still don't have my verification, but don't want it now – I decided not to buy the land. It was a $7,000 lesson about red tape and bureaucratic BS. I am now looking for land in another state – far away from [Corps employee].
- [Corps employee] has been an excellent source for information, has always been very professional and proficient and has helped me move many projects through the process in a timely manner.
- Process too long.

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- Very helpful.
- Process took 2 years. Too long.
- [Corps employee] took my request and reported to me in an exemplary manner. His conduct was both professional and most cordial at all times.
- [Corps employee] provided regulatory coordination services and processed an NWP. He performed an excellent public service. He was professional, thorough, responsive to calls & questions & relatively timely.
- Respond to telephone calls and questions more timely. Put professionalism first. Explain more thoroughly why projects are delayed as opposed to "they are in legal," and be able to let client know where or who has the request.
- The process for handling applications can improve for expediting the service. Allow public access on the web for updates on applications (status).
- Difficult to obtain an answer/return call by Telephone, that could improve. Internal Review process could improve. A conference with applicant to review comments from Project Manager would be beneficial. Difficult to determine status of Permit. Can that improve?
- In my opinion, the approval process took far too long (many months). Also, it would be very helpful to have the USACE provide, and review with the applicant, a list of all steps necessary to receive the final permits/authorization, with estimated times required for each step (with no additional conditions added during the process). My experience has been that it is difficult to get calls through to and back from the project manager at USACE. It would be desirable for the USACE project manager to work to minimize the time and effort required to receive final authorization.
- 9 months is too long for a standard nationwide permit. Should be 45 days. See Federal Register Vo. 67, No. 10,13, Notification, pg. 2090. Processing times are killing me!!!
- Improve processing time of nationwide permit. It should not take 6+ months. See Federal Register – 45 day time limit.
- Unfortunately, information that I sent to the Charleston office never made it to the Columbia office. Fortunately, [Corps employee] (after being out of town for a week) answered her phone and we spoke. I then went to Columbia (as I was in town on business) and met with [Corps employee]. He was very helpful & quickly helped me. I was then able to give his letter to the [state office] to release the funds for my project. But Columbia crew is in too small quarters. I hope you will move them to some bigger space. Very nice people there.
- Great job! Very helpful and timely. I've seen a lot of improvement in the past 6 months or so.
- [Corps employee] did an excellent job through the period that we worked with him. He was professional and efficient & provided services in a timely fashion.
- [Corps employee] performed in a very professional manner, was very nice and promptly returned our calls.

Chicago

Reported that it has no surveys.

N/A.

Detroit

Reported that it has no surveys.

N/A.

Fort Worth

Reported that it has no surveys.

N/A.

Galveston

Reported that it has no surveys.

N/A.

Honolulu

Reported that it has no surveys.

N/A.

Huntington

Reported that it has no surveys.

N/A.

Jacksonville

34 survey responses reported.

Rating of 1: 9 (26%)
Rating of 2: 3 (9%)
Rating of 3: 5 (15%)
Rating of 4: 8 (24%)
Rating of 5: 7 (21%)
Rating of N/A: 2 (6%)

- "The attitude of staff was unprofessional and adversarial. The staff threatened with absolutely no basis in fact or regulations."
- "Convince the South Permits Branch to follow the 404(b)(1) Guidelines."
- "More staffing"
- "Where is the information about the problems we are having here?"
- "Not happy we had to change the project, but now I understand."
- "(Corps employee) has done a good job handling DRIs but is not timely in issuing."
- "I really appreciate the helpful information that I have received on projects."
- "The above survey is only applicable to the many tribal (Seminole Indian)."
- "People are very nice and knowledgeable. Timing stinks."
- "The Palm Beach Gardens, Florida office needs more staff to handle the works."
- "It would be extremely helpful to provide wetland delineation verification."
- "Obviously can't handle the workload; average time to acquire permits from ACOE is 18-20 months…too long!"
- "I understand CE is understaffed and overloaded with work. Why is the staff creating more work for so many projects with minimal impacts?"
- "(Corps employee) was extremely helpful in working with our client's closing."
- "Accelerate the permit process. The pre-application meeting was held in July 2000 – the [applicant] finally received the permit in September 2003 (over three years!)"
- "So overworked and understaffed to handle such a large workload, that the process becomes management through government permitting! Staff adequately, then create reasonable, specific response times which the Corps must respond within. Not having any time accountability is not fair to the public or private sector."
- "Although the permit timing for the COE wasn't bad (about one year) the other necessary permits from the county and state took about six months, so it was the COE permit that held us up."
- "Applied for permit approx 5-22-02. This took a year to receive. However, after your agency began to work on the permit, it was fast and delivery was quick and professional."

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Kansas City

25 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 3 (12%)
Rating of 4: 4 (16%)
Rating of 5: 18 (72%)
Rating of N/A: 0 (0%)

- "Speed up process."
- "Develop a strategy to … Maybe you could have some trained retired people or other trained parties to do screening of compliance spot checks. They would report to the project manager who would either visit the site or take the spot checkers information to develop the violation report. Photographic records could help formalize the process."
- "Respond as quickly as possible or at least acknowledge receipt of request for information within a few days."
- "Very well done and (Corps employee) was helpful in explaining the process."
- "(Corps employee) was very helpful and processed the application within a few days. His efforts will assist the [applicant] to complete the project on-time. Thank you!"
- "(Corps employee) did an outstanding job to expedite the emergency pipeline maintenance permit. He answered all of my questions thoroughly, provided the appropriate direction, and had the permit approved in less than two days. He was exceptional."
- "I was pleased with the help and timeliness of the staff at the El Dorado, KS office in giving a jurisdictional determination on our project. They were extremely helpful and quick to reply to any correspondence."
- "By far and without question, I am extremely impressed with the technical knowledge and communication skills of the regulatory specialists in the KC office. Our firm works with four regional Corps offices in the Midwest USA in application of 100+ 404 permits annually. Although we may not always agree with staff decisions, we are treated fairly and professionally by the regulatory specialists who work under the supervision of (Corps employee)."
- "(Corps employee) was excellent to work with."
- "We deal with the Warsaw, MO office regarding rip rap permits on Lake of the Ozarks in Central MO. That office only has two people to handle permit applications and while they are always helpful, the six weeks that it generally takes to get permit approval adversely affects our business. They need more help or turn the permit program over to [another agency]."
- "We need to develop a NWP for stream relocations that currently require an IP. In the mining industry, we often encounter ephemeral drainages that are determined to be jurisdictional, and it would be advantageous for industry and the regulatory agencies if a NWP were in place to permit such activities. Not only would it save industry time and resources, but also it would decrease permit turnaround times for the agency, leaving more time for the regulatory specialist to perform their other duties."
- "In the crude oil producing department with so many small producers (the Majors have left the area), we are somewhat at a loss in the knowledge of what is a violation. I had no idea a pasture draw before a pond was considered a wet land. Perhaps a way to disseminate information to possible (ignorant) violators in the various occupations that could be potential violators."
- "(Corps employee) was very professional and personable and helped us remedy our situation."
- "Program seems to be appropriate, sensible, and effective."
- "We have consistently received excellent service and guidance from the Kansas Regulatory Office under demanding time frames."

Little Rock

40 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 2 (5%)
Rating of 4: 5 (13%)
Rating of 5: 32 (80%)
Rating of N/A: 1 (3%)

- "Response was very timely. This we appreciated."
- "A process to expedite minor projects would be helpful."
- "I was very impressed by this office's cooperation to resolve permitting issues even when the project manager was unavailable."
- "I worked with (Corps employee) in Branson, Mo., office and (Corps employee) at Little Rock office. They were both outstanding people. Thank you."
- "Both men are very courteous, polite, and a pleasure to work with. They each were extremely helpful and knowledgeable."
- "Very time consuming, but final product was worthwhile."
- "The person at both the mountain home, and the Little Rock office conducted themselves in a very professional manner."
- "I sincerely appreciate the level of quality service and support on the project."
- "Very smooth and timely process. My compliments to the Little Rock District on their promptness and professionalism."
- "We support carefully done projects and regulations that help keep waterways intact and healthy. Thank you for your work."
- "The COE Department worked well with us. Good working relationship—best within COE."
- "Both (Corps employees) were very helpful and professional. My permit was handled quickly."
- "Every thing work out good."

Los Angeles

Reported that it has no surveys.

N/A.

Louisville

Reported that it has no surveys.

N/A.

Memphis

19 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 1 (5%)
Rating of 4: 3 (16%)
Rating of 5: 14 (74%)
Rating of N/A: 1 (5%)

- "(Corps employee) has displayed the highest level of professionalism in all of my interactions with him on this project. He is responsive and knowledgeable. He obviously takes his job very seriously. I have worked with the Corps across the country and (this Corps employee) is one of the best Corps representatives I have encountered."
- "I want to commend all those involved in the Memphis Corps District, especially (Corps employee) for the prompt and processing and issuance of the individual 404 that (I) needed. As always, (this Corps employee) communicated with me about issues needing clarification, and made special efforts to issue by a deadline I was under. This is just one example of the top-notch work performed by your District. Thank you!"
- "I was very pleased with the handling of my case. (Corps employee) was very considerate and prompt in our situation."

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- "(Corps employee) went out of her way to give us the best service available."
- "Corps needs better communication with state agencies in regard to the overall info needed to acquire permits—Corps would tell me one thing and State would tell me something different. The entire process needs to be simplified."
- "We had a capital need to receive the individual 404 permit to replace several bridges, because the existing bridges were in poor condition and had been condemned, which closed the road. The Memphis District responded very quickly to our application, and their efforts have been of the highest quality."
- "Need more timely approval and issuance of permit.... However, Corps personnel were very helpful."
- "(Corps employee) was our primary contact. He was excellent to work with, followed up on calls and issues promptly, and worked well with us regarding explaining Corps requirements and what was required to meet them."

Mobile

50 survey responses reported.

Rating of 1: 3 (6%)
Rating of 2: 2 (4%)
Rating of 3: 5 (10%)
Rating of 4: 12 (24%)
Rating of 5: 24 (48%)
Rating of N/A: 4 (8%)

- "(Corps employee) does an outstanding job, but her work load is too great, especially since the restructuring. She needs more help, immediately."
- "The Corps representative personally visited our site to gain first-hand knowledge of our needs and plans. This extra effort was most helpful."
- "It should not take two months to get a reply for a water or sewer pipeline job review where the route will be returned to pre-construction elevations and contours."
- "Three months or longer is way too long to have to wait for replies from COE."
- "(Corps employee) was a pleasure to work with. His professional, common sense approach was greatly appreciated during my wetland determination process. Thank you!"
- "Mobile District has been very responsive."
- "(Corps employee) mentioned a Web site that would be updated to track when the Corps received a permit application, who the project manager will be, and the date it went on public notice. This would be very beneficial."
- "(Corps employee) was very friendly and helpful. He was a pleasure to work with on my permit."

Nashville

Reported that it has no surveys.

N/A.

New England

Reported that it has no surveys.

N/A.

New Orleans

168 survey responses reported.

Rating of 1: 4 (2%)
Rating of 2: 3 (2%)
Rating of 3: 11 (7%)
Rating of 4: 64 (38%)
Rating of 5: 77 (46%)
Rating of N/A: 9 (5%)

- "20 months to obtain permit, too long!"
- "Retire several people in your engineering division"
- "3 just this project, otherwise, high satisfaction"
- "We attended a pre-application meeting to speed up the process. We needed quick approval and were told to expect a 90-120 day process. Submitted application 4/4/03. We were then told to wait for Water Quality Certification. Then the 90 day review started. Then we were asked to provide a 'Needs and Alternatives' analysis, delaying the process. We finally received a final draft permit on 11/4/03 (over 200 days). The pre-application meeting was useless. No one told us to request the Water Quality Certification or to do the 'Needs and Alternatives' analysis. Many of these steps could be done concurrently to save time. We lost a lot of time, and now all faced with starting our clearing and excavation during the wet winter months."
- "During the preliminary stages of our project, we contacted the Corps of Engineers several times. Each time we were told that our project was not under Corps jurisdiction. We would not need a Corp of Engineers permit. Under a suggestion by a resident in the project area, we contacted the Corps during the final stages (bidding) of the project and at this point was told we needed a permit to contract. This held up project several months. Better info would help."
- "Your engineering division needs new people capable of thinking on their own, have some common sense and don't rely only on a 'standard.' Monkeys can rely only on 'standards'!!"
- "Your engineering division needs people who can think on their own, not rely only on 'standard,' & will use a little common sense!!"
- "Whatever can be done to speed the process up would be helpful."
- " (Corps employee) was courteous and profession during the permitting process."
- "(Corps employee) was very pleasant and professional – the entire process."
- "Took too long"
- "I believe there may be a need for additional secretarial help to process there types and permits."
- "(Corps employee) is a highly professional representative for the Corps. Please hire more people like her. Explains her need for certain types of information, lets consultant know her preferred format for response, always responds in timely manner, extremely courteous and respectful."
- "Works well. Sometimes it (the process) seems a little slow, but overall, very well done."
- "Excellent job by (Corps employee) from initial pre-application consultation through to issuance of permit."
- "(Corps employee) was very helpful."
- "The only aspect that we were critical of, as I mentioned in the Customer Satisfaction Survey on [another permit application], is that it took a lot longer than we anticipated to get the permit through your office. Hopefully, now that the first ones have been done, future permit requests will mover through more quickly."
- "We received good service, but permit took 9 months-hope next one is faster."
- "The mitigation program is a huge mess. The Corps actively discourages applicants from on-site mitigation. The mitigation sector provides widely divergent information to applicants and is consistent only in their inconsistency. If the District was serious about preserving wetland functions, values, you would assume they would be aggressively working to promote as much mitigation as pass, ok. Rather, we are in a situation they constitutes a monopoly in some watersheds. Also, the time to obtain a J.D. is currently ridiculous; up to 4 months and beyond."
- "I don't think there should be any mitigation fee! Never have I seen an agency with an employee like (Corps employee). He went

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above and beyond the call of duty to assist me. Without his expert assistance, I could not have provided your office with the necessary information. He was there all the way to assist me. My thanks goes to (Corps employee). I know he will be an asset to your agency."

- "(Corps employee) was the most professional and understanding person I have even dealt with. He made what I heard would be a nightmare, not bad at all. God bless him."
- "Very honest, nice, & informative about the project"
- "Very helpful"
- "Very helpful. This is my first time going through the permit process overall. It was happy with the process."
- "The regulatory program that USACE has established seems to work very well. In addition, the interagency communication (i.e., DEQ, DWF, USFWS, etc.) works very well. (Corps employee) was an excellent individual to work with and handled himself very professionally, thus, representing the USACE and the regulatory program in a positive way."
- "If all the permit writers were as professional, responsible and responsive as (Corps employee), you would have fewer complaints and irate applicants. He does exactly what he says he will do in a timely manner. He is clear about his objectives and does not vacillate, even when pressured. He is not afraid to be candid and direct."
- "It took almost five months for the jurisdiction/wetland determination following the submittal of a detailed report. This seems excessive. The District believes that mitigation should be reduced for stream maintenance activities where the wetland disturbance is temporary. In this permit, 100% mitigation was required for the entire, overbank wetland area which will be disturbed."
- "The majority of the time spent to get this permit was waiting for a wetland determination when we sent a wetland delineation in with the permit application."
- "There appear to be no controls over the cost of wetland mitigation banks. Within one month, the price I was required to pay was double the dollar amount paid by my neighbor for twice the impact area. This seemed almost criminal."
- "I am pleased with the quality of service you offer, with your continued striving for improvement, and with the professionalism and courtesy of your staff."
- "Make this survey easier to read."
- "(Corps employee) was helpful, the entire process was expeditiously handled."
- "My objections have always been selfish. The 'Corp' has always replied in reason while meeting the constraints of the wetlands law. I have had a very pleasant relationship with (Corps employee) and (Corps employee)."
- "Prompt and professional"
- "After all the stories I have heard about the different Government offices, I am impressed with the New Orleans District Corps of Engineers. They performed and executed my permit in a timely and efficient manner. I am very impressed."
- "(Corps employee) Project manager"
- "(Corps employee) was very helpful and friendly. He promptly returned every phone call and answered every question in plain English not government speak."
- "My contact with (Corps employee) in the office was entirely positive. (Corps employee) was extremely helpful. My only suggestion is that the time for permit submission to approval by speeded up (if not limited by statute)."
- "They should put a time limit on DEQ's response to public comments. Sept. 30, 2004, application sent to March 11, 2005: 5.5 months for a relatively simple development, which held up oil and gas production on a $3.5 million project and cost us thousands in attorney's fees. The state objections were largely generalized and not applicable to our site."
- "Applicant and agent made every effort to clear up potential questions or problems during pre-application meeting and site visit. During public notice period we were repeatedly told that everything was in order. After public notice period was complete, we were informed that USFWS and NOAA had commented a few weeks earlier and these issues needed to resolved, which prolong permit issuance. Once cleared VP, it took two weeks for permit to be signed."
- "Application filed on 04/07/04, public notice on 5/28/04, draft permit on 07/09/04, permit on 08/04/04. [Project] requested a May; 2004 start date. [Project] on 05/24/04. [Project] had to spud the well or loose the lease."
- "(Corps employee) was very helpful and responsive."
- "I have tried calling 7 or 8 people at your office at one time, and nobody answers their phone. This is very frustrating."
- "Stream line the permitting process"
- "We dealt with (Corps employee) on one of our permits. We had a very good response. He was very helpful. Thanks. Time seems to be our only concern. We would like the process to move faster."
- "It would be helpful if the jurisdictional information was more clear cut and easily obtainable. On some projects where it is not clear, I will typically contact someone at New Orleans office and ask their opinion, sometimes its still not clear whether a permit is Req'd."
- "(Corps employee) was very courteous and helpful with the project. Mitigation did not seem to be justified for this project."
- "(Corps employee) did an outstanding job of working the permit through. The only problem with this permit was the fact it was not issued under a Nationwide General Permit. I've had several permits in the pass in the same area and same size that took 30-45 days/permit and this permit took 90 plus days."
- "(Corps employee) was very helpful."
- "(Corps employee) was very professional in his dealings with us (COP) on obtaining our permit. It was highly appreciated that he returned phone calls in a timely manner and kept us up to date on the tracking and status of our permit application. I feel the whole process went well."
- "We had no problem with the process. Thanks for all your help."
- "The people of the Corp were always professional and courteous. I realize the Corp is understaffed, but the whole process seemed to take a long time (6 months to be exact)."
- "The Department of the Army permit correspondence can be more 'user-friendly' with respect to the referencing of projects. For example, when the [applicant] submits a 404 or Nationwide permit application for a specific project, the project name and contact person are provided (e.g., [particular position] or the individual project engineer) in the accompanying cover letter. However, follow-up correspondence from the Department of the Army typically does not reference this information. Rather, the work for which the permit is approved/addressed is usually only referenced by its newly assigned permit number which, until that time, the recipient has no knowledge of, and a vague description of the project vicinity. Considering that, in this instance, the recipient is a municipality with several outstanding permit applications for various projects located in relatively close proximity, the Department of the Army may consider amending its standard correspondence by referencing the project name and/or project engineer which have been assigned to the project by the municipality. Inclusion of this information would greatly aid the tracking of permits by the municipality."
- "Oct. 1 → Feb. 12 4 months 11 days to receive permit. Too long!!"
- "(Corps employee) is an exceptional project manager. Other: Other projects sit on desks once assigned with no action unless contact is made by applicant. Is there in-house guidelines on response/turnaround time on a project?"
- "I sent in my permit request-July 2, 2003 and did not hear anything until I called March, 2004. The person in charge of issuing permit called on 04/01/2004. I received my permit on 08/26/2004. I thought it took much too long for a really small job."
- "(Corps employee) is an outstanding Corps asset. I have been doing regulatory permitting for over 12 years and he is one of the

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best. I have ever worked with. However, they are serious problems with the mitigation evaluation section. There is no consistency in evaluation of mitigation proposals; the delay is inconceivably long, there appears to be active disregard of the December 2002 Regional Guidance Letter for mitigation."

- "This permit was applied for January 8, 2003. It was held up for over 6 months because of mitigation issues. This time could have been eliminated if the Corps and DNR had the same requirements regarding mitigating in a coastal zone."
- "Print forms so they can be read-larger print."
- "Say no sometimes."
- "The people I dealt with were very helpful."
- "We had a very good experience with USACE but had difficulty with other state and Federal agencies. Please make them more responsive."
- "I have never experienced any difficulty in working with the Corps. Every agent I have spoken with has been helpful, prompt and informed."
- "(Corps employee) is a true professional and a pleasure to deal with on a day to day basis. He is a true asset to the Corps!"
- "Seems to have improved recently. Case worker was extremely helpful."
- "From the time we received a cease + desist order to the time we received one permit was over 5 months. The resolution of one problem was very costly $5,250.00 to just want to cut the grass + very little fill. We also had to hire a consulting firm at the cost of $1,500.00. Because you need a degree to understand the papers needed. The time frame it took interest has gone up + lumber has rippled. This whole process was very costly. If this is going to be enforced why are so many people getting away with it?"
- "A command the Corps in its wetlands process, because in understanding its process, it helps to replenish and provide timely resources for generation to some."

New York

Reported that it has no surveys.

N/A.

Norfolk

Reported that it has no surveys.

N/A.

Omaha

2 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 0 (0%)
Rating of 4: 0 (0%)
Rating of 5: 2 (100%)
Rating of N/A: 0 (0%)

- "The Omaha District is efficient in approving projects and issuing approvals."

Philadelphia

Reported that it has no surveys.

N/A.

Pittsburgh

Reported that it has no surveys.

N/A.

Portland

7 survey responses reported.

Rating of 1: 1 (14%)
Rating of 2: 2 (29%)
Rating of 3: 0 (0%)
Rating of 4: 0 (0%)
Rating of 5: 4 (57%)
Rating of N/A: 0 (0%)

- "Individuals in the permitting process should be better aware of the Corps own regulations. I had to point them out!"
- "There are no timelines for a standard individual permit."
- "(Corps employee) has made the whole Mitigation Banking process easier."
- "(Corps employee) was very helpful during the permitting process."

Rock Island

180 survey responses reported.

Rating of 1: 1 (1%)
Rating of 2: 1 (1%)
Rating of 3: 3 (2%)
Rating of 4: 60 (33%)
Rating of 5: 99 (55%)
Rating of N/A: 16 (9%)

- "It appears that the IEPA does not begin its' review until after the Corps collects all of its' material. We send the same material to the IEPA at the same time. Why can't they start their review (and public notice) sooner?"
- "We were very pleased working with (Corps employee). He was very helpful."
- "Very helpful."
- "Give (Corps employee) a raise and more vacation."
- "Avoid so many public notices. This lake/dam had 4. IDNR Nov 15, Corps Dec 18, Corps Feb 5, IEPA May 14. Why can't some of these be combined, to save time?"
- "We appreciate your help in the past and look forward to working with COE personnel in the future. COE personnel have always been helpful and have taken care of permit applications in a very timely manner. Thanks!"
- "Responses to questions or concerns were answered promptly and professionally. (Corps employees) were extremely helpful in the permit process."
- "Contact persons were very efficient and helpful."
- "Excellent working relationship."
- "When we are working with NRCS on a streambank project it seems like there are too many agencies and too many forms to fill out, couldn't there be some cooperation and trust between agencies to get the work done in a more timely manner?"
- "It was a pleasure working with (Corps employee). He was very prompt at responding to our permit request via phone, letter and on-site review. He was very helpful and personable. The Corps is very fortunate to have (Corps employee) as an employee."
- "We were very pleased with the help we received."
- "Satisfied customer."
- "Worked very well with us and answered any and all questions."
- "The process is very thorough and time consuming, but the Corps personnel were very helpful and professional."
- "They're ok."
- "Slow review and permit processing time."
- "Illinois DNR appears to have missed C of E public notice and subsequent communications. I am relaying them material by mail now."
- "(Corps employee) was patient and helpful through the entire

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process. We (permit applicant) appreciate your cooperation in this permit process."

- "Although this approval process took much longer than we anticipated, we greatly appreciate the personal nature by which (Corps employee) worked with us to move through the process."
- "All seemed reasonable to me. – It's the people that do not apply but take law into their own hands that disturb me."
- "(Corps employee) was very helpful, however the other agencies slowed up the process. (Corps employee) did all he could to speed up the permit process."
- "The original permit decision was for an Iowa regional permit. It was determined a month later an individual permit is actually required. The district made ever effort to expedite the individual permit process. The permit approval just met the project letting schedule."
- "I thought it was great that (Corps employee) followed up with questions prior to issuing permit and even to make sure I had received permit and to make sure I was signing it and sending it back."
- "(Corps employee) met with us on site and any uncertainties were clarified. I appreciated his individual effort."
- "It would be helpful to have regulatory staff visit proposed projects prior to actual application to determine best possible course of action."
- "Considering our situation I thought the Corp representatives handled everything very well."
- "The staff of the Regulatory Branch have always been very knowledgeable and helpful."
- "The applicant should be better advised to how long the process will take in order to better plan projects."
- "(Corps employee) was very helpful and I thank him for his time and patience."
- "Excellent."
- "We were treated professionally and fairly."
- "It is always a pleasant experience to speak with and work with (Corps employee) whether it be on a specific project or regarding an issue in general. (Corps employee) is always prompt and courteous in all responses and very helpful in directing both us and our clients on the appropriate regulatory path."
- "The whole process was done very professionally."
- "Am totally satisfied with entire program in particular the friendly personnel."
- "(Corps employee) was very helpful throughout the process."
- "No suggestions, but having served in the Corps of Engineers for over 24 years (military) including three years as a District Engineer, I was very impressed with (Corps employee)'s professionalism."
- "I would have liked to work more on a personal bases with this project for ideas on how to do this but know it is too small and your time and personnel are limited. Thank you."
- "(Corps employee) was very polite and professional. Enjoyed doing business with him."
- "(Corps employees) were very helpful in the application process. We thank them for their assistance."
- "I received a letter from a (Corps employee) indicating that I did not do status reports. I do not know who she is or why I would give her status reports. What is the relationship to R.I. Corp of Engineers? Too many agencies involved – the public only wants one contact! I consider my contact (Corps employee)."
- "We appreciate the fast processing of this permit modification. Having this permit this fall will give us the ability to clean sand away from our wastewater effluent diffuser this fall white water levels are low. Thanks!"
- "Everything worked out well, thank you."
- "It is a big help to have people like (Corps employee) to explain the complexities and options clearly and accurately. Qualified people administering the program make it workable."
- "(Corps employee) did a good job, but the process takes too!! Long!! I was dealing with a life and safety issue of getting campers safely off campground, and thank god we had no floods this summer. I also do not think the arch. survey was necessary on this site."
- "(Corps employee) was very helpful and knowledgeable."
- "I think the amount of permit applications submitted is why the permitting process took so long. (Corps employee) was great to deal with and answered all the questions regarding the permit. I definitely would want to work w/ (Corps employee) again! The process took an additional 6-weeks compared to the duration in 2004."
- "Excellent customer service. Keep up the good work!"
- "It would he very helpful to applicants if it was clearly slated in the application materials that the Iowa DNR should be contacted early in the process to review mitigation needs before a final selection has been made on a mitigation site. This would avoid committing to a mitigation site that could be unacceptable to the Iowa DNR."
- "(Corps employees) were very helpful in permit process. I have question though, the amount of time that Corps employees had to spend on a .2 acre project. Seems to me that could better be used in other areas."
- "Permit process was smooth and fair."
- "Went very smoothly."
- "In our case the Corps Representative played the part of the mediator between us and dealing with other agencies involved. Between the program and the representative. The process on our behalf went very smoothly and very professional with everyone involved."
- "Very helpful."
- "The regulatory office personnel has always been professional and helpful to DOT's District 6 office. District 6 appreciates the relationship we have with the ACOE."
- "The Corp has been very helpful."
- "(Corps employee) was very helpful in obtaining my permit."
- "(Corps employee) was helpful."

Sacramento

447 survey responses reported.

Rating of 1: 9 (2%)
Rating of 2: 11 (2%)
Rating of 3: 28 (6%)
Rating of 4: 113 (25%)
Rating of 5: 256 (57%)
Rating of N/A: 30 (7%)

- "(Corps employee) is a pleasure to work with. He is very professional, communicates clearly and concisely and makes every effort to respond in a timely fashion. He is highly knowledgeable and gives very helpful advice throughout the permitting process."
- "I know these are places where pushing the river rocks along the bank with a caterpillar are just as effective as any other method. It is also better for the environment and is more cost effective."
- "(Corps employee) at site visit was very informative and had solutions/suggestions to help us achieve what needed to be done."
- "(Corps employee) was very prompt and helpful in processing the request."
- "It would be helpful if the time to verify a delineation could be more consistent; sometimes a few weeks, other times it is months. Difficult to reach person in office—no admin staff to answer/take calls."
- "As a CRMP organization, we are committed to watershed, stream, and riparian improvements/restorations. State and federal regulatory programs have been developed to control negative impact projects. A program to deal with positive impact projects is due and would greatly aid the COE regulatory goals."
- "US Army Corps personnel were efficient and responsive. If there is any way you could prompt or push the US Fish and Wildlife harder on responding with "consultations on Biop" it would be appreciated."
- "(Corps employee) did an outstanding job processing the permit authorization in a very short time period."

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- "Everyone I spoke with was extremely helpful and professional. The Web page is also very helpful."
- "I consistently receive professional, knowledgeable, and competent help from (Corps employee) at the Sacramento office. She has been my main contact for a number of years."
- "Good work!"
- "In the past the Corps has not been reasonable or quick in responding. This time it went well. (Corps employee) was very responsive, helpful and reasonable in the permit process."
- "Both individuals were very courteous and professional, though I think they are overloaded with work such that they can't make decisions in a timely and accurate manner. I respect the work they are doing, though I don't think much thought or time was given to this project due to their overwhelming workload."
- "Again, thank you. Very interesting process."
- "The routine maintenance and enhancement of wetlands should be covered by a categorical exclusion, nationwide permit and BO for the entire preserve or refuge. Too much time for all involved to do this on a project by project basis."
- "Please have additional staff when or if funding becomes available. We understand a lot of work comes through your office with little resources. Your existing staff does an amazing job with the time they have."
- "Keep up the good work. Thank you."
- "Staff seems knowledgeable and courteous just maybe overloaded. For large projects, developers would trade higher fees (use of 'approved' consultants perhaps) for speedier permits."
- "Great job on timeliness."
- "(Corps employee) needs assistance on workload. Workload appears to be too great for timely turnaround. Expertise and knowledge is good, but responses to status of permit/no permit letter were slow due to workload."
- "(Corps employee) can be a hard person to get in touch with. But since I've been dealing with him over the past 3-4 years I have always received prompt, courteous service."
- "Very helpful. Good comments in pre-application meeting."
- "This process was relatively easy as far as the Corps and (applicant) was concerned—thanks to (Corps employee). We will have ongoing work on a regular basis (yearly); I wish I could get a blanket permit for the yearly clean-up we need to do to maintain the integrity of the bridge. Fish and Game is still holding up our application."
- "Working with (Corps employee) has been a pleasure as well as an education. (Corps employee) has gone the extra mile to assist my needs. Many thanks!"
- "Thanks for the speedy response!"
- "Corps staff is very helpful, but I think workload is so large that permit work is impacted. Please get some resources to help your regulatory staff with their huge workload."
- "(Corps employee) was very professional and very, very helpful."
- "Service has been great but I have been in no hurry to complete."
- "Keep up the good work!"
- "(Corps employee)'s heart was in the right place, but it seemed to take quite a long time to obtain the 404 permit, particularly after we had conceptual agreement on mitigation and the delineation quite early on."
- "Owners' in-person contact with office counter staff was reportedly not pleasant. My (pre-app) conversation with (Corps employee) and (post-app) conversations with (Corps employee) were helpful and informative."
- "(Corps employee) has given me exceptional service in understanding and submitting ACOE permit applications. We truly appreciate the information she gave us to assist us in expediting the permit process and look forward to working with her in the future."
- "Once applicant has authorized an agent, allow permit documents to be sent to agent directly. It could be a check box on the application form."
- "It's slow, cumbersome and staffed by people who are not motivated to produce a finished product. The only agency I would rate lower is US FWS! COE/US FWS staff need to forget personal biases and do their job."
- "Better coordination between the state and federal permit process. My calls were rarely returned, but when they were I received helpful information on permit status."
- "Wish other agencies, marine fisheries, RWQCB were as responsive."
- "Our client had an emergency situation and (Corps employee) was able to issue a nationwide permit within a week. I greatly appreciated her quick response time and action."
- "I submitted a project notification in June 2003 and did not get a response back until September 2003. Other Corps districts have sent me letters indicating that their workload is heavy and that would not be able to respond until a certain date. This courtesy is greatly appreciated when consultants deal with their clients."
- "The Web site is very helpful and always seems to be up-to-date. Our Corps representative is very helpful and always tries to respond to our questions. He is very knowledgeable and has a wide range of experience that is helpful when trying to find solutions for a complex project."
- "I am impressed with the professional, timely manner that the permit application was processed."
- "Great job—everything was done when and as represented by (Corps employee)."
- "Everyone including secretaries, receptionist, and higher ups have been polite, professional and responsive to our needs—Thank you Corps and (Corps employee)!"
- "Please process applications in a timely manner."
- "(Corps employee) has been a great help to us regarding wetland and other water-related issues."
- "Keep up the good work."
- "Application was submitted December 6, 2004. Delineation drawings were received by Corps on December 27, 2004. Jurisdictional determination from Corps was issued March 9, 2005. NWP was issued on March 23, 2005 (almost four months after application was submitted)."
- "Interpretation of regulations is arbitrary. There is no consistency between project managers."
- "It was a pleasure to work with (Corps employee). We work with a lot of regulators and she is in the top group regarding time to respond, clarity of what was required, and professional approach and interactions."
- "My only comment is that this process took approximately three years to complete – I felt it could have happened much more efficiently and more quickly. I had three different Corps employees during the approval process."
- "(Corps employee) was very professional – gave information that helped in avoiding many wetlands. She was very responsive and always gave information that was clear and important to our project!! I would work with her again."
- "Response times appear to be getting longer."
- "(Corps employees) are great to work with. The process seemed to take longer than we anticipated. But I understand that personnel changes were being made. It would benefit all if the process could be streamlined."
- "Very poor communication. Very slow to return phone calls. Greater than 50 days to approve NWP – no additional information requested."
- "Very unsatisfied with how a piece of land was taken care of. I was confused of what they were doing for approximately six months. Then was not instructed on how to secure a permit or even if I needed one. All they have done is delayed progress for me on approximately 1/2-acre of wet property."
- "(Corps employee) and her staff are consistent with their help and responses to our regulatory requests (typically jurisdictional determinations). We do appreciate that. Thanks."
- "In the aftermath of the [] fire with the watersheds … directly west of [] Dam being a (class 1) high hazard burn area our project

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application (request) and permit was handled with utmost expediency."

- "It would have been helpful for the description of the project to include a map of the proposed project site or a copy of the application. We know the stabilization needs to be done, but how and where it is planned to take place is unclear without delving into our legal documents (deeds, etc.)."
- "(Corps employee) was great – give her a raise."
- "(Corps employee) was wonderful to work with."
- "I have always had an excellent working relationship with Corps staff in the state of Colorado."
- (Corps employee) consistently does an outstanding job with her technical review and professionalism as a public official."
- "Only comment I have is that this group of Corps reps I work with here in Grand Jct are great!"
- "Used to have contact person list on website which was very nice. Last time I couldn't find it."
- "Since we determined that the Army Corps of Engineers was the agency in charge, the information and guidance given was prompt, complete and straight forward. This has been a very positive experience."
- "(Corps employee) is very professional, helpful, communicates clearly and is a pleasure to work with."
- "Thank you very much for facilitating our replacement of our water line."
- "(Corps employee) was as reasonable and helpful as I could have hoped for."
- "I found (Corps employee) a very approachable, informative person. She reviewed the proposal thoroughly, asked pertinent questions and then answered my questions. I appreciated her enthusiasm for our concept – a Z sheeting water diversion structure to upgrade our irrigation. We feel it will have minimal impact yet increase efficiency."
- "This project was on a very tight schedule to complete the work before spring runoff started. (Corps employee) was very helpful in helping/allowing the project to be completed in a short time frame."
- "The review process for a river restoration project on Ohio Creek (Gunnison County) went very well. Somewhat concerned about time required by U.S. Fish and Wildlife service to provide comments on NWP. Corps personnel went to extra lengths to obtain USFWS comments – Very much appreciated!!"
- "It was easier than expected."
- "(Corps employee) works on [applicant] projects through WRDA. This relationship has been very positive. The ACOE must do everything possible to ensure WRDA is authorized."
- "(Corps employee) is wonderful to work with; however, he is obviously overworked and does not have the opportunity to adequately review all projects submitted by the City. Please hire another person for the Redding office!"
- "You need more staff."
- "Thanks for expediting our application."
- "Permit apps need to be turned faster than nine months."
- "Received no response to submitted materials for 4 ½ months; had to make 14 phone calls and resubmit to receive any response."
- "(Corps employees) are very helpful and knowledgeable – however, they are both extremely difficult to reach. More staffing seems appropriate."
- "(Corps employee) was the utmost professional. He was able to help us comply with NWP 27 in a most timely manner."
- "Excellent responsiveness. Keep up the good work!"
- "(Corps employee) was very responsive and professional. I enjoyed working with him and hope to continue working with him in the future."
- "It would be helpful if the process was quicker."
- "(Corps employee) is always very professional and helpful. I wish other agencies were as responsive and easy to work with."
- "(Corps employee) was always available to offer assistance and answer questions during the permit request procedure. He promptly returned all phone calls and was very informative."
- "We were informed that the only delay in issuing the LOP was the issuance of a 401 certificate. However, the LOP wasn't issued until a month and a half after the 401 certificate was issued, causing us to lose the opportunity to perform the activity when hydrologic conditions would have been ideal. The only reason given for the delay was that staff were 'busy.'"
- "Applicant needs to receive confirmation that their application was received by USACE."
- "As usual, the Corps needs more staff in the Regulatory Branch to improve service-time. Service overall was good and staff were courteous and helpful."
- "Need more rapid review of submitted materials and quicker turn-around time for written responses to applicant. Need more rapid response to phone calls as well. Many of the special conditions in this and other permits are standard clauses that might be applicable to some of the businesses above, but not necessarily to public entities. This standard language seems to be for the benefit of ACOE staff in issuing a permit so as not to have to create customized conditions relevant to the subject action. Some of this language can have unacceptable legal implications. Our requests to remove or modify conditions, with explanations provided, were largely ignored."
- "Is there any specific information that would help the Corp in determining that all clearance (NEPA and CEQA) have been met."
- "(Corps employee) provided excellent service – timely and efficient – the way the NWP process should work."
- "It took eight months and two letters to receive this extension. So, the answers to (some of the survey questions) apply more to the time frame from the second letter dated Nov. 23 and the extension (decision) which was received in mid-December. Otherwise, I'd give (those questions) a ranking of 2."
- "Time is of essence. I sincerely hope that the Corps speed up processing of applications."
- "Once (Corps employee) was assigned the case, the process move forward with sufficient speed. The ratings of "1" in (certain survey questions) would be 3 or 4 each. Main issue is the amount of time between contact with a formal letter and getting the case assigned to a representative."
- "(Corps employees) were both very helpful and extremely nice."
- "I found the Corps to be helpful and informative."
- "(Corps employee) was very helpful and informative. My project was an emergency rock slope protection job, that both hydraulic engineers and structures professionals, here at (applicant), though was necessary to save the bridge abutment from failure. (Corps employee) was very concerned with the purpose and need of the project, proposed mitigation and minimizing environmental impacts, will protecting the integrity of the bridge abutment."
- "(Corps employee) was really helpful to respond rapidly to correspondence (via email). We were pushing for a tight turn around and he was able to work with us to meet our deadline. He was also really happy to discuss our project over the phone."
- "Once application has been received, please notify person or owner of land what is happening and keep us appraised of situation outcome – excellent."
- "It appears that too many agencies are separately involved. It would help if the Corps would set up a focal point and all responses went through one informed coordinator – as it was we were left to contact five or six different agencies and deal with all of them. Without being informed we had a hard time satisfying their multiple requirements and even our engineer was pulling his hair out to meet all of the new and changing requirements. System is totally disorganized – this is not taxpayer friendly."
- "I think that the Department of the Army created an unnecessary burden on its Regulatory staff by creating a lapse in NWP coverage – with all expiring at the same time, and then not re-issuing permits during the February-March gap. It was a very good idea, however, to give 'grandfather' status or grace period to permits for projects currently in construction."
- "I was pleased (and surprised!) about how fast and streamlined

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the permitting process was for our project. My only suggestion is that, if possible, the Army Corp, the water quality control board and fish and game work together to produce some sort of master permit form – seemed like there is a lot of duplication among the forms each agency uses. Otherwise, great job! Thank you."

- "Normally very good about returning phone calls and is fairly easy to reach via phone. Pleasure to work with."
- "I have worked with them all, (Corps employee) is one of the best! Also attached letter stating: 'In addition to the enclosed Customer Service Survey, I would like to say a special thank you to (Corps employee) for his timely assistance and advice on both the delineation information that we provided and the issuance of the Nationwide 39 for this project. I have worked with the Sacramento District office for many years, first as Chief of Environmental Management for [former applicant], and then as a private consultant. My staff has always appreciated the professionalism of your team of specialists; however, I am convinced that (Corp employee)'s attention to detail and willingness to provide expeditious service has been particularly noteworthy. Sometimes we don't take time to say thank you. I did not want to miss this opportunity to mention (Corp employee)'s positive attitude and spirit of helpfulness. On behalf of the entire wetland delineation staff of (company), please pass on our thanks for a job well done.'"
- "I dealt with two people regarding this permit/reverification. One person was very friendly, and returned my calls. The other person never called back, even though she said she would call back that day. This reverification took a little longer than I expected, but still not too bad. Overall I am satisfied."
- "Give estimated time to resolve case and when not done so, make contact to explain delay and set new time line."
- "(Corps employee) was very helpful and responsive. I have had difficulty reaching other Corps staff. More interns or more staff in general would be good. Several times regular staff has not responded to telephone calls and e-mail, possibly because they are not able to do so with their current workload, but it is quite a problem."
- "Develop a specific 'response time' for the various requests and permit applications that requires written documentation of the corps action on a request or application put before the agency. A 'response time' that allows only a couple of weeks to pass, not several weeks or months. The Corps of Engineers must develop a high level of respect for private enterprise and that 'time is money' after all—the American economy is what pays the salaries at the Corps!"
- "As usual the delays occur with USFWS, not the Corps. The entire Corps regulatory staff in Sacramento is great to work with. Thanks."
- "The nationwide general permit was adopted for the (particular) project. No other permit type was offered. Why? Where do we really stand if nationwide permit #27 has been denied by state of Cal. What agency denied #27? Our project is a funded grant by DWR. The entire idea of "dredged and discharge" doesn't fit this project."
- "Dealing with the Army Corps was very easy and (Corps employee) was helpful and courteous throughout the project. Difficulties came in getting concurrence from other agencies in regards to section 7 consultation."
- "The advice and other courtesies extended to (permit applicant) during the permit transfer process was very helpful and professional."
- "Process takes too long to perform routine leave maintenance due to unresponsive NMFS and USFWS. The response time to receive biological opinions regarding waterside maintenance burdens on the ridiculous. The last two requests submitted to the Corps for confirmation that work is covered under NW3 has resulted in an average delay of nine months to get authorization to perform levee repair."
- "Obtaining the permits and permission to go ahead with a bank stabilization project is a convoluted paper trail between government agencies that needs to be simplified for the homeowner with a simple erosion project. The should be one govt organization that handles all the paperwork for permits to the various agencies. Government agencies should consider combining their permit requirements to a single application that meets the needs of all concerned."
- "(Corps employee) has continuously provided me with excellent service for the last 1-2 years. Thank you!"
- "I think that (Corps employee) helped us as best he could, but given his workload, he could not respond in a timely manner. It took a month after he received the last document needed for permit approval to get us the permit. We submitted our permit application at the end of August, and received the permit at the end of November."
- "Excellent service is consistently provided."
- "Overall the regulatory program and process functioned well. The most frustrating part was the multi agency coordination, which was ambiguous at best. It would be helpful to have more upfront info about the process and better agency coordination. It is difficult to move through the system and the truth is, it shouldn't be. Good work does not get done because of the delays."
- "There needs to be more information on the process in the beginning and the order that everything that needs to be done in an outline page given to the layman permitter showing them what needs to be done and in what order evolved be helpful, at the beginning of the project."
- "'Staff-up' to handle more permit applications in a timely manner. Utilize staff that are 'tuned-in' to the development approval processes of local governments!!"
- "Would like to see more efficient processing of paperwork. We understand that the ACOE is busy with many different projects but expect that the less complicated projects that just require send concurrence letters be pushed along more quickly."
- "Thank you!"
- "After two years of waiting for our 404 permit, we thought asking for a modification/amendment was going to be disastrous, but (Corps employee) was able to guide us through the process, making it relatively seamless as well as painless. It was outstanding to have some one in the area with a common sense of approach to field modifications!"
- "Hire more personnel to keep up with all the demands and violations. Stop being just a 'permitting agency' and be a regulatory agency – don't just issue permits to everyone – Say NO sometimes (which the Corps rarely does) and enforce violations."
- "Very helpful, made sure we had needed information in our notification to speed/smooth process along. Made suggestions of ways to improve project."
- "(Corps employee) was very knowledgeable and helpful."
- "Have backup staff available during vacations or trainings."
- "The staff in this office are very professional and competent. I enjoy working with them."
- "The improvements over the past few years have been fantastic. We still need to improve overall communication, but it seems to be getting better all the time."
- "Everything went well – little delay – and good response after my information was submitted."
- "Thanks."
- "It was refreshing for my client to have such a quick review. Helps engineers to accept/comply with permit process."
- "Your representative was very forthright and accommodating. Thank you."
- "Especially helpful."
- "Provide more clear and concise information on the process. Provide feedback in a more timely manner. Understand the local communities and issues at hand better."
- "I had heard nightmares about how long the process would take. I was pleasantly surprised as how fast and smooth the process was. Thanks."
- "Everyone I spoke with was extremely helpful. The information they gave was excellent."
- "Office is improving on response time. Representative made ju-

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risdictional determination based on field observations and data rather than personal feelings about the project site. Welcome change in COE representatives."

- "I needed a natl wetlands inventory map – (Corps employee) only had one, she let me borrow it to copy – I appreciate the service."
- "(Corps employee) does a wonderful job for the COE. She is thorough, professional, and efficient. We enjoy working with her."
- "Be project specific on permit conditions. Avoid boiler plate conditions if they don't apply."
- "Although the delineations of my land involved with wetlands was determined to be irrigation, industrial and non jurisdictional, your agent has still made them jurisdictional even though she recognizes that they are caused by irrigation water and would clay up if this water is removed. Also the irrigation canal which is open now will soon be put into pipeline which will somehow dry up my area. You have confiscated my land and I protest. I will be seeking assistance from a higher authority, and damages incurred."
- "I am relatively new at dealing with Corps regulatory issues. (Corps employee), new to the Durango area, has been extremely patient, kind, and professional, not to mention helpful. She has taken what appears to be a well-reasoned, common sense approach to the projects we've undertaken to develop."
- "Excellent service."
- "Thank you for always being prompt."
- "Our new permit conditions seem to side more with an adjacent landowner vs. the operators and USACE establishing their own guidelines based on specific site conditions."
- "Protection for riparian communities in Colorado would be nice."
- "(Corps employee) recently conducted a wetlands training course to 30 [] County employees. His presentation covered topics appropriate for road and bridge, building, assessor and planning staff. The presentation was concise, well-thought out and presented in a 'learning' manner that all participants enjoyed. (Corps employee)'s openness to accept questions during the presentation and with the case study were well received. Thank you! Also attached to survey was letter that stated '[] County would like to take this opportunity to express our appreciation to the U.S. Army Corps of Engineers, and to compliment your Summit County, Colorado, Frisco Office staff. We have had tremendous support from your staff as both a regulatory agency, and as a permit applicant. The one-person 'do-it-all' Frisco Office is managed by (Corps employee). Over the last two years, he has been a invaluahle resource to the [] County staff in interpreting the regulation as the development continues to increase in [] County. He has provided technical expertise to Road and Bridge and the Planning and Zoning staff in the assessment of ongoing development. [] County has a diverse ecosystem that ranges from the [described areas]. We value his experience and expertise understands the variety of issues we face in the development around these areas. (Corps employee) recently conducted a six-hour training course, providing instruction to over 30 [] County staff from the Assessor, Building, Road and Bridge, Natural Resources and Planning and Zoning departments. The highly informative course was the first of a two-part course. (Corps employee) provided information on the role of the U.S. Army Corps of Engineers, the intricacies of the permitting process, and technical information related to soils, hydrology and vegetative parameters associated with wetlands. We sincerely appreciate the high-level of technical expertise provided, through (Corps employee), as a reprehensive of the U.S. Army Corps of Engineers. This available consultation has enabled our staff to manage regulatory issues associated with wetlands permitting in this area of rapid development with respect to current the laws. We have attached the requested Customer Service Survey to this letter, providing specific comment on the U.S. Army Corps of Engineers services, at the request of (Corps employee).'"
- "I completely enjoy working with (Corps employee); he is a very good resource."
- "(Corps employee) was very helpful."
- "Always helpful and prompt."
- "(Corps employee) was very helpful and extremely prompt."
- "(Corps employee) was great to deal with on this project. Thank you."
- "(Corps employee) has been extremely helpful and responsive to all of our permit and general needs. His professionalism, knowledge and promptness have made working with the Corps a true pleasure."
- "(Corps employee) was excellent. He did not tell me what I wanted to hear, but he was polite, considerate and very knowledgeable and he could convey the information to me. Excellent employee."
- "This form should include the appropriate when to send it in to."
- "Quit nit-picking the small (really small) stuff and bust people's chops for violations or failing to follow thru w/mitigation. Require bonding for all mitigation activities (that will make them do it!)"
- "Great people and service, no improvement needed."
- "We would not have known to apply for this permit except for an article in local paper (not enclosed) about a violation. More publication about this act would help enforcement. (Corps employee) met w/us onsite to explain requirements and was very helpful."
- "Everyone was very helpful and the permitting went smooth."
- "(Corps employee) was extremely helpful and very professionally."
- "(Corps employee) was very helpful and received a prompt response to my application."
- "Web page I know at one time there was a list of office contacts for particular county locations (for projects). This was very nice but now it doesn't seem to be there, hum. This application and request went very well and I appreciate (Corps employee)'s help and e-mailing of information."

San Francisco

Reported that it has no surveys.

N/A.

Savannah

363 survey responses reported.
Rating of 1: 7 (1%)
Rating of 2: 17 (4%)
Rating of 3: 26 (7%)
Rating of 4: 137 (37%)
Rating of 5: 156 (42%)
Rating of N/A: 20 (5%)

- "Being an ex. army officer it's always a pleasure."
- "Very Good."
- "We work in numerous Districts. Savannah is by far the most professional and efficient."
- "Project managers reviewed & processed permit well within an acceptable time frame. Project managers answered phone or returned calls ASAP. Savannah District should be used as a model for operation of any state or federal regulatory program."
- "Good service, informative – All seemed to go smoothly."
- "(Corps employee) does an excellent job for the COE. He is very professional in the way he handles himself, and his job."
- "Great turn around time! Thank you!"
- "Yes. I was treated very well. Everyone was professional, courteous, informative. I really appreciated the helpfulness and response time I received."
- "(Corps employee) provided very prompt service."
- "Have more people like (Corps employee). He was efficient, thorough, pleasant and a pleasure to have serve a member of the general public-What quick service!"
- "(Corps employee) did an excellent helping us understand & navigate all applicable rules & regulations. We grateful for his help. If the rest of your people are this helpful, I would say your program is in very good shape. Thanks once again."

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- "I thought (Corps employee) was very helpful & gave me personal attention and was very encouraging in my efforts to work up the permit. I was also impressed by (Corps employee) and his personal attention to my project."
- "Very informed, very professional, very punctual, and an excellent biologist."
- "Create time tables for review! (not needed in the Savannah office, very quick to reply) Jacksonville is taking 12-18+ months! Small guys cannot carry their projects due to this long period."
- "Outstanding permitting. Less time required than ever before."
- "Very professional and responsive. He went well beyond effort required to serve us and the effort is very appreciated."
- "I think it would be helpful if the local issuing authority understood what they must require to issue a permit. They seem to put too much of the approval process back on the USACOE."
- "Very good service. Special thanks to (Corps employee)."
- "Very good service. Special thanks to (Corps employee)."
- "Recommend you regulate the non-point source discharges."
- "Working with and communication with the Corps was excellent. Working with GA. DNR coastal resources division difficult with frustrating communications."
- "None."
- "(Corps employee) has been very pleasant to work with. He handles a tremendous workload, but remains cordial and timely in his response."
- "Very please with the service and prompt response to address our issues."
- "Anyone who files a compliant should have to identify themselves."
- "None."
- "You have a good program but seem to be over worked."
- "Needs more help to cover this area."
- "Thank you for the help!"
- "Things seem to move faster through the Albany office."
- "Lourdes County is very grateful for (Corps employee) in the Albany office, without him so close, it would be hard to get things done in a timely fashion."
- "I was pleased with the office's suggestions & action. He was very prompt."
- "We have always found the Albany office, specifically (Corps employee) to be knowledgeable, prompt and fair. If all of the USACOE districts were as good. our lives would be a lot easier! Keep up the good work."
- "(Corps employee) is very professional and knowledgeable of the Corps permitting program. He is prompt in his reviews, field inspections, and correspondence. He returns phone calls in a timely fashion and provides prompt responses to inquiries."
- "(Corps employee) is very professional, knowledgeable, efficient and prompt. (Corps employee) dealt with my issues (on 3-4 occasions) and each time was thorough and reasonable. (Corps employee) is a pleasure to work with and is very knowledgeable about the issues."
- "Since the Albany field office opened, our experiences with the corps and regulatory program have greatly improved. Our dealings with (Corps employee) have been straight forward and very professional. His local presence has definitely contributed to a much better public understanding of the regulatory program and has created a sound working relationship with the corps and consultants/developers."
- "We have worked closely with (Corps employee) in the Albany office on several projects and have been very pleased with his efforts in relation to our projects. We look forward to a continued relationship with them. If you have any questions please do not hesitate to call."
- "(Corps employee) was very professional and very helpful."
- "Nice group to work with."
- "Reference [application number]. See attachment."
- "No-Savannah office is excellent to work with."
- "The Savannah District operates in a professional and organized manner. Staff are very courteous and a pleasure to work with."
- "The Corps was very helpful in the permit application process. However we have not received the permit not because of the Corps but because of local political influence. The permit is now on hold pending modification to appease the local population politics."
- "This was my first encounter dealing with the Corps Wetland/Stream bank mitigation. All contact was through our consultant, [name, location]. Based on the prompt & reasoned response to our permit application I would rate the Corps as outstanding! My thanks to those involved."
- "Although you may not agree with everything the Corps says at least unlike some agencies it does not change its mind in middle of project."
- "Savannah District has been extremely responsive-the Jacksonville District could learn from Savannah."
- "Keep plenty of office & field staff in Albany."
- "(Corps employee) was very helpful."
- "Good Work."
- "Dam application was submitted some 5 months prior by Atkinson County NRCS agent. It was not sent certified mail. When NRCS agent called about information & status, the application could not be found and Corps agent had retired. I mailed certified mail and received excellent service."
- "Entire staff in Morron GA is always very professional. Savannah has been the same. Thank You!"
- "(Corps employee) seemed very busy but made time to help me with this permit. He had a lot of good information, very professional. Thanks."
- "Yes, The office was very prompt, courteous, informative & helpful."
- "The officer was very good."
- "None, I got along fine with everyone. Just do the job you were hired to do!"
- "(Corps employee) took the time to explain what was required for a wetland delineation submittal and how it differed from the District which I am used to dealing with. (Corps employee) was very responsive and reasonable to deal with over the phone, and clear in explaining what further information he needed to make a determination. My overall experience with this District was pleasant. I am used to dealing with a District representative in another state who will not return phone calls, respond to wetland determination requests in a timely manner. Thank you for issuing this survey."
- "The Savannah office has many fine and very capable employees. Personnel handling larger and more complex projects are especially capable. Excellent working relationship with (Corps employee) suggest developing RGPs for minor activities."
- "(Corps employee) enters into his duties in a most energetic & professional manner. He's good at suggesting changes that will assist you with your project, & come within regulations."
- "Mitigation Bank development requires coordination between various Agencies – one interagency experience is ranked as follows A+=Excellent or F=Very poor: COE-A+; FWA-B; EPD-B+; NMFS-B-; EPA-F."
- "I found everyone (including receptionist) to be very pleasant and helpful. The professionals were responsive in a timely manner. I requested an inspection, after construction, to ensure compliance. They responded promptly and were very helpful through the entire project."
- "No, they have not completed sand pump yet. I am just helping them get started."
- "None."
- "Both parties noted above were very professional & helpful through this process."
- "(Corps employee) provided excellent guidance and responded to our requests in a timely and professional manner. In all, his guidance has ensured that our project proceed in a timely manner, within budget and ensuring regulatory compliance."
- "All experiences with corps personnel have been favorable!"
- "(Corps employee) is an excellent provider of information. He

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returns calls promptly. He is knowledgeable, courteous and an integral part of working through the permit process."

- "USACE staff was very helpful and provided guidance toward proper procedures to be followed in submitting the application."
- "I find that different Corps Districts have different interpretations/concepts/definitions of 'Waters of the U.S.' It would be beneficial to consultants, delineators, developers & Corps Project Managers to be 'singing off the same sheet of music!' There is information & definition of Waters of the U.S. published in the CFR that could be used as a start to expand a 'guidance document,' which could be distributed to all concerned."
- "No."
- "None."
- "Response was prompt but due to recent Supreme Court decisions (US v. Rapanos and US v. Corabell) a final determination could not be made."
- "Did a great job! He is an asset to the corps! My problem was with the cultural assessment review. It took 8 months to get this review completed. The total NWP permit process time was 1 year for approval. A time restriction needs to be placed on the archaelogist and SHPO so that projects do not get delayed beyond reason. I know everyone is busy, but 8 mths is totally uncalled for."
- "The process went well."
- "Overall the permit system worked. Quicker response time would be appreciated."
- "Need to improve processing of paperwork."
- "To date my experiences with the corps & the Savannah office in particular have been positive. I have found the corps representatives to be responsive, helpful, and professional."
- "Keep us informed – delays are OK (usually!) if we can predict and plan for them. USACE is good at chain of command – if we are not getting a response then there is always another person to contact – that helps."
- "Who to contact (p.m. names) has been difficult to find. Seems that staff names are hidden unless you are one of the frequent consultants."
- "References to the stringent conditions written in a NWP."
- "It should be clear & consistent advice to be given by various PM's within an office."
- "We received permit much sooner than expected."
- "Focus on issues that are important to resolve. Drop detailed Farm Pond 'permit' as those are exempt from permit process."
- "Could use more training. He seems a bit unsure of himself."
- "The process for making land available for use as mitigation credits should be revised in an attempt to make it more clear."
- "(Corps employee) does an outstanding job! I believe he needs assistance."
- "(Corps employee) was very professional, knowledgeable, and helpful. He gave regulatory information, assisted in taking measurements and made suggestions about my dock placement in light of the regulations. He was wonderful! Please inform me as to what August 2002 action this notice refers to. I got my Dock permit in August 2004. What do I have to do when whatever in Aug. 2005 expires? Thank you."
- "Easy to work with & responsive!"
- "(1) Better understanding of new stream definitions so they can teach the general public. (2) Better education for those tring to develop a Wetland Mitigation Bank, can't assume that the permittee has done this before."
- "The nationwide permit took an excessive amount of time to approve b/c we had to apply 3 different times under different permit numbers. I believe the process would've been more timely, if the corps regulators would have agreed on the appropriate NW no. and communicated that to me the first time. Otherwise - the staff at the Morrow office has always been very courteous, friendly, & responsive."
- "New info and forms should be more readily available on the web. Info is present but sometimes difficult to obtain."
- "The Savannah District is much better than other districts in response time to letters and especially to phone calls. Kudos!! Always responsive to questions before and during the application process."
- "Very satisfied with prof. interactions with Sav. Dist esp. with (Corps employee) also (Corps employee)."
- "I thought that (Corps employees) were very professional and fair to me with my dock expansion request in spite of my neighbors strong opposition. The approval process was a little slow probably because the Corps won't provide an adequate staff."
- "The permitting process was handled through our engineers. I thought it was slow."
- "Jurisdictional calls need to be more consistent from site to site. Calls on borrow pits need to be more consistent."
- "This particular application was processed very quickly and we appreciate it."
- "(Corps employee did a great job! I feel that you could do better with more personnel to relieve case overload on curent staff. But I understand budget restraints."
- "A prompt action on the receipt of request should be done to inform the applicant that the request has been received and a Corps rep. has been assigned your case. A response in two weeks instead of 4 weeks will be greatly appreciated."
- "Spend more time on enforcement and compliance."
- "Sometimes people do not return my calls. The Corps needs to develop a better compliance/enforcement program. I see people getting away with all kinds of stuff!"
- "Thank you for making the process more transparant & inviting us to give our input!"
- "Please re-emphasize the importance of returning phone calls & email."
- "more people; better trained employees; some issues handled very well – response time sometimes a problem."
- "Timely responsiveness in the North Area Office, Savannah District is problematic. An evaluation of this problem is recommended, followed by corrective action."
- "Regulatory Program focused too heavy on 'we are in charge' procedures. Fails to use common sense and too often (punishes) catches the very people trying to do it right."
- "Hire more staff in order to decrease the review time. The Bank's interest meter is always running!!"
- "(1) I believe one pitfall is that when a letter is issued for permit (etc.) even though we did all of the upfront and throughout the process coordination, we don't get copied on the approval letter. We have ask the client for a copy for the files. This has happened 3-4 times lately. (2) We have also gotten wrong answers a few times & had to press the issues with backup from the Fed. Register; (3) Some of the reasoning for their interpretation wasn't consistent either but we did come to some understanding and as long as we know what they want we can provide it."
- "The only issue we saw in our experience is that the staff has too much work load. They are constantly having to prioritize and you never know where your application falls in the list."
- "We need enforcement to be a priority in the SW corner of Ga. Applicants who follow the process are 'penalized' with time & coast where others proceed without ACOE involvement."
- "The turn around time for simple jurisdictional determinations should not take so long. When a consultant has proven to be accurate in the past, I think a desk-top determination should suffice."
- "Section 106 review is sometimes conducted in a very unprofessional manner."
- "I feel that the Corps staff works very hard but is understaffed to handle all aspects of the program."
- "North area section, with a few exceptions (Corps employee); employees are essentially non-responsive to phone calls or inquiries. Need more employees in North Area section. North Area section has a severe lack of scientific knowledge concerning streams & wetlands. Need more field verifications of WL & streams even for PCN's."
- "Rotating staff – problem; inconsistant project mgrs; failure to meet deadlines that were established by USACE project mgrs. Failure to return phone calls."

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- "Low water levels are concerns to us all. We are always happy to see full pool. But when we applied for our permit water levels were low and we had the opportunity to excavate sitt material."
- "The individual who handled our case file had more going on than he could handle. I would suggest hiring additional staff."
- "North Area Section has many, many problems that should be resolved including excessive timeframes, inconsistency, unresponsiveness and general lack of knowledge. Southern Section (Savannah) generally much better."
- "I believe that some staff are incapable of being productive and/or making competent decisions. Other staff do an excellent job. In my opinion North Area Section is tremendously understaffed to perform their required duties."
- "Do not return calls. Inconsistent interpretations (especially regarding storm water detention facilities). NWP applications often go past 45 days. Cannot get a JD verification without a permit application. No response to permit extension request."
- "COE staff needs to understand COE rules."
- "Took forever to receive call backs and even longer to receive the permit. I should have remembered and utilized the 45 day response time but due to the fact I am used to Savannah being extremely, I don't think about it."
- "I had already received a permit through DNR & then I got a letter from Corp of Engineers saying my permit from them was not valid. I was in the process of selling property & had to make repeated calls to get any action & they were not real nice about it at all. It took a long time to get it all worked out – I assume it did – I had already moved & three realtors were on it!"
- "Most staff rarely return phone calls/emails in a timely manner, if at all. Get rid of USACE archeologist. Redundant with Ga. Historic Preservation Division. Most other USACE districts have no archeologist. Morrow, Ga office, in most cases, appears adversarial and obstructionist in the permitting process, and more interested in protecting their rear-ends than in helping applicants. It is just as easy, or easier, to be nice, professional, helpful, and friendly, as it is to be adversarial. Corps comments in IP's often reflect that they have not read the application. As a consultant who spends a large amount of time on preparing a thorough, detailed, complete application, it is very frustrating for a project manager to make comments or ask questions that are clearly addressed in the permit application document."
- "Fed Ex'd survey plats to the attorney for Corps of Engineers in order to file a restrictive covenant on 120 acres. All the documents were originals and all were lost. We had to take the time and effort to fax and mail a second batch."
- "I basically know nothing more about if the property was wetlands after I talked to (Corps employee) than I did before I talked to him. If he had just explained to me on the phone when I first talked to him on Aug. 21, that I would have to hire an environmental engineer to determine that I had wetlands, it would have saved me 2 months of phone calls and letters."
- "Regulatory program was never explained to me by your regulatory specialist, (Corps employee) who did work out of the Morrow Georgia office."
- "Transfer jurisdiction over wetlands out of the Army to a better managed and customer-friendly organization."
- "I was denied a permit to dig a 1/2 acre pond on my property and never informed of any tax relief. Adjacent to my 'wetlands', a house and roads have been constructed. The soil and plant life looks the same, there is also standing water. Why was that permitted?"
- "Permitting takes too long - Corps doesn't have enough review personnnel. I think delay built into system to discourage development - not because it really takes that long to evaluate."
- "(1) Improve communications; (2) Streamline application process; (3) simplify permit process."
- "It is unconceivable that it was one and 1/2 (1 1/2) years for the state to issue a permit for a neighborhood floating dock and over a year for approval by the Corp of Engineers. I submitted all the required measurements and all other details when requested - ultimately I considered it harassement – I shared my frustrations and approval was finally given."
- "Our individual 404 permit for a reservoir took almost 4 years for approval, and that was with congressional help. (Corps employee) was in charge of the process on our project for much of that period and his lack of organization and lack of follow-up were frequently a cause of frustration and delay. In general it seemed to me that the Corps personnel were out-gunned, from the standpoint of regulatory knowledge and zeal, by their counterparts at EPA and USFWS. The EPA and USFWS personnel that I dealth with are philosophically opposed to any new water reservoirs and they basically pushed the Corps aside and ruled the permitting process on our project. Had it not been for intervention by our Congressman, I doubt we would have gotten the EPA and USFWS to end their filibuster. The Corps could improve the 404 permitting process by hiring and promoting only qualified and trained personnel, and by removing the east ways to bypass regualtory time limits for completion of permit decisions."
- "Many Questions Can & Should Be Addressed to: (Corps employees)."
- "This request for authorization was handled quickly."
- "The GA EPD UST Program has a 'duty officer of the Day' who responsively returns phone calls to provide general info for question from the public. Such a service @ the COE would be very helpful."
- "Need written evidence on isolated wetlands. Greater consistancy needed on sites requiring field visits. I know it is not an exact science and field conditions can vary however calls should be made regardless of who is submitting projects and who is the project manager. For the sake of fairness. Thank you for this session today and feedback."
- "I did not apply for the permit myself. The dock builder applied for me."
- "All USCOE contact was through Georgia DNR."
- "The program should be adeuately staffed to timely review and respond to all applications. Should be staffed to complete reviews and respond within 30 days. Congress should authorize staffing for all mandated programs."
- "Please change the contact info in your system from (to whom this survey was sent) to me."
- "I feel that your office/staff did a respectable job, considering the scope of duties & other responsibilities."
- "Very efficient."
- "I am fully retired. Please drop me from your mailing list. Thank you."
- "(Corps employee) was our 3rd project manager during the authorization/permit process for this bank. I believe without her managing/facilitating this project - it may not have happened. It was a high profile mitigation bank with multi-agency and organization coordination. We appreciated her positive attitude and management style in coordinating with us and other agencies and to meet everyone's deadlines."
- "[Consultant] did the work and made contract with you for the owners. See Letter to me frm the Corps dated 5/10/04 and project [number]. Since I didn't deal with you directly, I hesitate to answer your questions. Overall, I'd give you an A+. The only problem was with this form and the approved and expiriation dates, along with the OMB shown on the other page. I thought this applied to our … and called (Corps employee) who looked into it & called me back & promptly."

Seattle

6 survey responses reported.

Rating of 1: 2 (33%)
Rating of 2: 0 (0%)
Rating of 3: 1 (17%)

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Rating of 4: 0 (0%)
Rating of 5: 3 (50%)
Rating of N/A: 0 (0%)

- "The regulatory program is making decisions based on non-existent or uncompleted studies."
- "Non-responsive to[]application submitted on 05/25/05."
- "(Corps employee) is very competent, but slow in processing documentation and returning phone calls or email."
- "Seemed to be a mountain of paper to wade through but I understand."

St. Louis

14 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 0 (0%)
Rating of 4: 2 (14%)
Rating of 5: 10 (71%)
Rating of N/A: 2 (14%)

- "Earlier notification of required archeological survey."
- "Keep doing what you are doing. I have always found (Corps employees) to be very fair and forthright in addressing DA permit requirements on difficult improvement projects."
- "Developers need quick turnaround time—2 months max."
- "We had a very positive experience with the Corps. The MO Dept of Natural Resources held all of us up for months: they "lost" our application! With (Corps employee's) assistance, we were able to remedy the process."
- "Both (Corps employees) were very pleasant and professional with their assistance and information to aid in this permit process. (Corps employee) worked personally with me, providing information to help complete this application. (Corps employee) was either available when I called or promptly returned by calls when I had any questions or needed help. It has been a pleasure to deal with everyone in your St. Louis District of the Regulatory Branch. Keep up the good work."
- "Everyone was most helpful and polite."
- "Let the Corps do their job and limit the other agencies' control over river issues. The Corps has done a great job the last 50 years. Let them continue."
- "(Corps employees) were very helpful, fair and professional. They are a credit to your staff and their profession."

St. Paul

Reported that it has no surveys.
N/A.

Tulsa

Reported that it has no surveys.

N/A.

Vicksburg

2 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 0 (0%)
Rating of 4: 1 (50%)
Rating of 5: 1 (50%)
Rating of N/A: 0 (0%)

No comments.

Walla Walla

12 survey responses reported.

Rating of 1: 0 (0%)
Rating of 2: 0 (0%)
Rating of 3: 0 (0%)
Rating of 4: 3 (25%)
Rating of 5: 9 (75%)
Rating of N/A: 0 (0%)

- "I was glad that (Corps employee) took the time to meet with [applicant] to do a site visit."
- "I have had a great working relationship with the Corp."
- "I was sure surprised with all the help I got from (Corps employee)."
- "(Corps employee) is a valuable asset to the Corps."
- "I was impressed and very pleased with how quickly (Corps employee) handled the work."
- (Corps employee) is great to work with. I wish that all agencies were as helpful."

Wilmington

489 survey responses reported.

Rating of 1: 4 (1%)
Rating of 2: 5 (1%)
Rating of 3: 17 (3%)
Rating of 4: 131 (27%)
Rating of 5: 326 (67%)
Rating of N/A: 6 (1%)

- "Excellent – very professional."
- "Recommend changes to wetland 0.1 acre requirement especially for pipeline projects. Requirement governs limits regardless of project (i.e. 0.1 acre requirement whether project is 100,000 feet or 5,000 feet)."
- "Should be regulated by federal government without state involvement."
- "Exceptionally responsible, reasonable and professional response."
- "Very professional and timely response."
- "Would like to talk with someone."
- "Both (Corps employees) were extremely helpful, and expeditious in their written and telephone responses to my needs and requests. The responses I have received from the USACE have been satisfactory or better."
- "[Consultant] worked with the Corps to obtain necessary permits on our behalf. I had no direct contact with anyone from your agency."
- "(Corps employee) was very prompt on all questions and very helpful. It has been a pleasure working with him."
- "Need a condensed, concise policy letter explaining mitigation requirements, acreage thresholds, isolated wetlands, etc. Update the Wilmington District Web site. The Charleston District has an outstanding Web site—user friendly with good information."
- "Everything is fine."
- "Professional and timely responses were received."
- "ACOE is lacking the necessary staff in most offices to do the amount of work being requested by applicants and consultants."
- "Keep up the good work! Responsive, professional, helpful under pressure."
- "The program is needed, and the Raleigh District is fair and professional."
- "I have been very satisfied working with (Corps employee). Communication is the key. We continuously discuss projects to ensure that schedules and commitments are followed through. (Corps employee)'s knowledge of the regulations leaves little for

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interpretation. My maintenance crews have commented positively of (Corps employee) but less positively of the regulations."

- "Question III.5. was given a 3 overall mainly due to past problems with responsiveness in the Wilmington Office. Raleigh, Asheville, and Washington have always been fairly responsive. However, I want to note that staff changes/reassignments in Wilmington have resulted in much better response time in the last 6-8 months. I hope that will continue."
- "My wife and I found the Corps familiar with the subject property in telephone conversations, and I found email correspondence very productive in the permitting process. Thanks, for a smooth job."
- "Too anti-development in locations where problems seem minimal and regulations seem overly burdensome."
- "Need a Programmatic General permit that will cover most pope replacement work performed by NCDOT on secondary construction (grading, draining, improvements and paving) projects."
- "Overall, and with very few exceptions, I have found the Wilmington Reg. Office to be as knowledgeable, consistent, and professional as any regulatory agency I've dealt with. Thanks very much!"
- "A wetland determination was not done on the complete tract on land. There is 35.71 acres on that tract of land. I don't feel that all of the land is wetland. My grandparents did farm on that land years ago."
- "TVA & Corps of Engineers work well together."
- "Well satisfied process was expedient – well managed."
- "The process was handled with excellent cooperation and efficiency as far as I was concerned."
- "We appreciate the professionalism demonstrated by (Corps employee) and his promptness."
- "(Corps employee) responded to all correspondence in a highly proficient and timely manner."
- "Keep up the good works."
- "(Corps employee) has been more than helpful in my efforts to build. He has acted promptly and professionally in dealing with the wetlands issue. I do wish other governing bodies involved could be as accommodating as (Corps employee)."
- "I have dealt with (Corps employee) on several projects. He is organized, very knowledgeable, and informative about project work. I enjoy working with (Corps employee) because he explains the COE view of impacts and explains permit requirements."
- "(Corps employee) was very nice and very helpful with my project."
- "Generally our relationship and responses have been very good – over the most recent few years. (Corps employee) is very good to work with. Our most often concern/complaint is the amount of the (delay) to be able to get him to as site – but we also understand that he covers a large area and is only one person. More like him would be great."
- "Too many regulation on about everything. My freedom to do with my property is no more allowed, so I have to accept and do as I learn what regulations are. I was informed in a very nice way."
- "(Corps employee) has stepped into the Wilmington office and ensured a smooth transition in personnel. His willingness to answer questions and coordinate efforts with DCM makes the difficult regulatory task bearable. (Corps employee) maintains a door of open communication that is to be commended."
- "I need more land to pump hog waste on because of too much copper and zinc. Because of redoing a lagoon it took off 12 acres of land. I need to clear 20 acres of land to put me back where I need to be to grow the same amount of hogs. I need all the help I can get from you."
- "Very cooperative and helpful with application process."
- "More personnel, in position like (Corps employee)'s would expedite the procedure! (Corps employee) was wonderful, helpful, good at explaining and clarifying the process and thorough. He's worth waiting for. But if there are three times as many of him our only complaint is the length of time the process took, because of the workload on limited personnel members."
- "Very thorough and knowledgeable."
- "Information needs to complete our application are either available on the web and where questions/concerns occur. District personnel have responded in a timely and professional manner."
- "All personnel were professional."
- "Better line of communication with quicker responses without having to use private enterprises to consult."
- "This was sent to lot owner – but the contractor who did our shoreline work is: [contractor]."
- "(Corps employee) – You did an outstanding job with this situation. Thank you."
- "Regulatory Program is completely justified. It serves the purpose to protect wetlands and all the benefits of wetlands. Wetlands must be protected."
- "I would request that the firm submitting the application for the applicant receive a copy of the correspondence/permit for the project. I would like to note that (Corps employee) is very efficient and processes permits in a timely manner."
- "(Corps employee) has always provided prompt and courteous service to personnel in [applicant] Division. He is an excellent public servant."
- "Yes – We need regular, quarterly meetings with the regulatory agencies (Corps, DWQ, & DCM) to discuss policy/process improvements. The resource agencies (WRC, FWS, etc.) need to come to only a few of these meetings."
- "The process was smooth and (Corps employee) was very responsive. Thank You!"
- "(Corps employee), I want to thank you for your sending (another Corps employee) to the property. He was very professional, did an excellent job, and was very helpful. I consider him an excellent young man and I hope the Corps will assign him to Carteret County. We need a man of his integrity."
- "(Corps employee) was most helpful while we went through the process of wetland determination and filling out the appropriate permit. We greatly appreciate her time and knowledge in regards to our situation."
- "I feel the Corps do an outstanding job. I have worked with the Wilmington Office in the past on a personal level – very professional – Thanks."
- "Wetlands need to be protected. They serve many beneficial purposes."
- "The process worked as designed."
- "Keep up the good work. (Corps employee) has always been timely, professional and definitive with guidance regarding permitting issues/questions."
- "(Corps employee) was an invaluable asset. He assisted with the process from start to finish. He intervened on our behalf while dealing with a difficult engineering firm. Excellent job."
- "Work on taking jurisdiction over isolated wetlands and include stream and wetland buffers/transition zones as impacts – like NJ's program."
- "Repost email addresses on Web site to expedite communications."
- "(Corps employee) did an excellent and very professional job."
- "Website is greatly improved in recent years. (Corps employees) are both excellent to work with, very helpful and responsive."
- "(Corps employee) needs more help! It takes a considerable amount of time to get him out in the field for a JD."
- "I wanted to clear for pasture land about 10 acres of cut over woods land. I called soil and water in Onslow Co., to meet me to show them what I'd like to do – no one called. I received a letter telling me what I could clear. I've called back three times and can't get anyone to talk to me. If you'll call and leave me a number on my message line, I'll call you back. Please Call."
- "Please stop taking our land."
- "The area marked "wet" was so small and should have been exempt due to how little (about 30x20 or smaller?). The actual impact of this area is so insignificant that getting a permit will be certain and so why could (Corps employee) not be given authority on the spot to "ok" filling this tiny area?"

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- "If you would highlight questions to be answered for individual project, it would be easier on the applicant! Trying to figure out what was being asked was not always easy for a lay person. P.S. Love the results!!"
- "Too much discretion given to individuals – verbally told one thing and documented something else. Process too long and redundant. Received permit after excessive jumping through hoops and not given enough time to get state and local permits. Forced to start over to what appears to be worse than the first time. System totally unfair in my mind! I have never been through any process like this and am totally disillusioned. I, to my knowledge, have done everything by the book and get shot down over and over. Contrary to advice given by many others I thought that playing by the rules was the proper and right thing to do. To my knowledge no one has ever said the project is not permittable. Just seems that I am being taught a lesson by doing things the right way. The wetlands on my project are not of a significant nature. Was informed by the local Corp field rep that buying into the mitigation project is not possible. I have been informed by others that it is. I have contracted with [contractor]..."
- "Figure out a way to reduce interactions and site visits."
- "Incredibly slow process."
- "Can I build a riprap wall or retaining wall on the shoreline high water mark?"
- "All of my dealings with (Corps employee) have been very prompt, responsive and professional. He is an asset to your organization."
- "Very good service."
- "(Corps employee) has always been professional and very fair with us. I believe that he is an asset to the COE and we are happy to have him as our rep."
- "To whether or not 401 certification and a CAMA CD are required for each of the Nationwide/General Permits."
- "Why not require all lot owners to riprap the shore? With all the boating this shoreline is gradually eroding into the lake along with trees, etc! At least require new construction on upgrades?"
- "I deal with the Corps on a day to day basis. Electronic PCN Submission would save time and materials."
- "All of the folks in your Asheville Office are remarkable and I cannot commend them highly enough for their service – unless you had numbers above 5."
- "I thought both (Corps employee) were very polite. It took longer to get info than I thought, however. I know they are very busy."
- "(Corps employee) was very helpful and quick to respond to situation."
- "(Corps employee) provide to us the information requested in a timely manner."
- "(Corps employee) was very professional and helpful."
- "You need more help!"
- "(Corps employee) was most pleasant and helpful! Amount of time to receive a response was hampered by needing input from another agency, I'm sure. Alotta cooks, alotta broth!"
- "Need more Regulatory Officials – takes 1-2 months to schedule site visits and meetings because current officials are too busy."
- "They need to speed up to a slow walk."
- "Some difficulty contacting and meeting with personnel due to scheduling."
- "Sharp employee. Local and state officials have little or no information on my topic – permission/requirements on pond construction. Educate them, please."
- "Extremely helpful."
- "Consider additional staff to improve 6-8 week waiting period for site visits."
- "(Corps employee) was able to go out to our site and delineate the wetlands in a very timely manner. Thanks."
- "Most of them on one project or another. If you agree verbally to something then stick with that decision."
- "Very helpful in telling us what to do and in what order."
- "Excellent responses and help."
- "As always, I appreciate the staff's assistance and willingness to discuss the project and alternatives."
- "(Corps employee) is an approachable person. She enforces your policies consistently. She's a nice lady. Clone her. P.S. – She makes every effort to be available for consultation."
- "It was a pleasure dealing with (Corps employee) of you office. He was courteous, competent and extremely knowledgeable. He represented the Corps of Engineers in a truly professional manner."
- "Regulatory staff are understaffed. The time it takes to schedule, view, and return JD notifications is very long. Paperwork from the Corps has been difficult to get."
- "W/except. of bklog (minr delays to sch. site vts, get writ. Corres, etc), I cont. to apprec the cnsstnt & predictable hndlng pmt apps from ofc to ofc (much more cnsstnt than Norfolk). Imprvmnt wld be reduce the shftng of respons. in Ral Ofc."
- "The process was efficient and timely (Corps employee) was helpful, informative, and courteous a special thanks for his assistance in this matter."
- "(Corps employee) is consistently fair and thorough when evaluating our [] permit requests."
- "(Corps employee) is very helpful and a pleasure to work with."
- "Keep up the good work!"
- "Provide information in a timely manner. Corp visited the site on 3/31/05 but did not provide notification of jurisdiction determination (no wetland) until 5/3/05! This has a lot to do with why people do what they want and don't mess with you."
- "I have found that working through my Division 6 Environmental Engineer, (Corps employee), that issues are resolved in advance or very quickly."
- "I feel the COE was very helpful and I appreciate everyone involved working towards the same goal."
- "I had a man made pond which I wanted to fill. I called your ofc & was told by the person in charge that he was too busy to see the property & I could go to a private ofc or wait 9 mos. The office recommended charges $3500. I thought that was excessive."
- "I much prefer working with USAD-Wilmington than NCDENR."
- "(Corps employee) was great to work with, sounds like she could use an assistant. She is very busy."
- "JD Review time is OK as long as we can schedule site visits before the work is completed. Corps staff is one of the most professional regulatory agency we work with."
- "Excellent response/contact-always helpful with 'how' to go through process. Too restrictive here in piedmont; small, isolated wetlands frequently a result of 'low' spot on an old farm road and serve no useful purpose."
- "The regulations are tough on the mining industry. However, the Corps staff personnel have been very helpful in dealing with our issues."
- "(Corps employee) was exceptionally cordial, professional and quick with answers. I have worked with many agencies over the years and she is as competent as anyone I have worked with."
- "We have worked with (Corps employee) several times on various projects. He is very professional and is an excellent public servant and good regulator."
- "(Corps employee) was very helpful thanks."
- "(Corps employee) as a pleasure to work with. She took the time to explain what she was looking for."
- "(Corps employee) is great to work with and is very knowledgeable. Please keep her in the Asheville office."
- "I feel the program is well run, responses are prompt and detailed, and the contacts in the office are knowledgeable and helpful."
- "Develop a contact page on the website that is same for all districts by department."
- "Used permits 4-u to complete paperwork."
- "(Corps employee) is fair and reasonable to work/deal with."
- "(Corps employee) has been in the past and continues to be re-

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sponsive to our needs as a consultant. He is very professional, well versed in his area of expertise and a pleasure to work with.”

- “Where is the enforcement program? It seems that there is very little Corps/Federal enforcement in western North Carolina (Charlotte and westward) of unauthorized activities. It is hard as a consultant to tell developers what they are and are not allowed to do when the guy down the road is completely ignoring the 404-401 program. Why hasn’t North Carolina been able to announce a $550000 fine like the recently announced Corps violation against the Mungo Co. in Columbia SC?”
- “The actual inspection and delineation of the wetlands on the property were first rate and the inspector was knowledgeable, friendly, and helpful. We had about a 6 week waiting time though for an inspection that took 30 minutes. Perhaps that was what the work load demanded but 3 to 4 weeks would have been much more helpful.”
- “Keep (Corps employee) – He is a great employee.”
- “(Corps employee) was very professional and informative. He answered all my questions. He explain what he was doing and why. If I have any other dealing with the Corps, I am sure that I will be treated with respect and courtesy. Judging by (Corps employee) representation of USACE.”
- “It is very difficult to understand why a mosquito breeding stagnant mud hole cannot be filled in with soil and grass making it clean and beautiful.”
- “The only reason agent slow to respond is due to overloaded. Agent very pleased with this office. Thank you.”
- “This property was said to be Wet Land which was caused by the Hurricane three years ago. There were lots of wash out all over the state of NC. I am only applying for a permit to replace the sand that washed out from the Hurricane. Every one makes repairs from Hurricane damage why can’t I with sand. This property has been in the [] Family for over 100 years and the taxes have always been paid. There are new homes on each side same distance from water and the same type of soil.”
- “Everyone in this office has been very professional and courtesy to our needs. We enjoy working with this office and staff.”
- “Had a very favorable experience with (Corps employee). He handled this case very promptly and timely and made it very clear what he needed. He returned all calls quickly. I appreciate his help with our matter. Also worked with (Corps employee) and had a great experience with her as well.”
- “We had made an appt. with (Corps employee) and he was due to come to my lots in a 3-wk period. He left. (Another Corps employee) was hired and then wasn’t able to respond for approx. 4 weeks due to timing. Once (Corps employee) was able to come all fell into place in a timely manner.”
- “(Corps employee) was highly professional. We were impressed with his knowledge, willingness to explain determination criteria, and quick response to phone calls and completion of report. A credit to your organization.”
- “Excellent to work with; honestly believe he helped us through this as fast as possible. Proves you can be a nice guy and an effective regulator at the same time. Still just have a tough time swallowing extent to which the wet waters of US jurisdiction is being claimed by Corps.”
- “Both were top notch!”
- “(Corps employee) always takes a fair and even minded regulatory approach. We are highly satisfied with his service and feel that he is an asset to the COE and the State of North Carolina.”
- “The Corps should continue efforts to develop a certified wetland delineator program. Valuable time could be saved by allowing Corps reps. to make/sign JDs from an office review or a cert delineators submittal rather than requiring a site review every time.”
- “My original request was misplaced possibly by the post office, but once (Corps employee) received the documents, she worked my request into her schedule quickly and kept me informed at each step of the process.”
- “But spoke to Asheville, NC Office, (Corps employee), she was great. Pleasant and productive.”
- “Very pleased with the information and the guidance on the project and permit.”
- “(Corps employee) is level headed, approachable and fair person. She’s very attentive.”
- “Wetland regs are very tough on money mining ops in eastern NC. Stone reserves. are almost depleted since pit expansion is difficult when surrounded by wetlands. There is no easy answer. Mining is not perm. Old pits become nice lakes for water supplier or well or creating new wetlands.”
- “I believe the field offices are understaffed based on my past exp. & the current amount of devel. 15 yrs and USACE response was quicker in the Asheville Office. Also who covers employees called up for hurricane duty?”
- “Raleigh Regulatory field office seems to have staff shortage that has resulted in excessive response times in recent past.”
- “We appreciate the valuable insight offered by (Corps employee).”
- “(Corps employee) was very professional and gave out great information.”
- “Continue to hire personnel with the same demeanor as (Corps employee).”
- “I think the Corps had to spend a lot of time to approve this one residential home. If this much time is needed for each request then the Corps is under staffed big time.”
- “This was a smooth process. Thank you.”
- “I just wanted to note how appreciative I am of the efforts of the USACE. (Corps employee) was the contact person for this project but had been assigned to emergency duty as a result of Hurricane Katrina. I was concerned that the permit might get hung up but that was not the case at all. (Corps employee) processed the permit on (Corps employee)’s behalf and there were no glitches at all. I appreciate that you all pull together and work collectively even during difficult times [i.e. Katrina]. Thank you.”
- “Our Site at [location] was delineated by [contractor] on 5/26/05. No wetlands found on site. We were notified 7/15/05 by [town] that we must have a Jurisdictional Determination Letter before our building permit could be released. Notified [contractor] according to [contractor] site visits would not be a problem delineation and photos were sent to the Corps by our professional environmental consultant [name]. (Corps employee) has responded to our calls where others have not been as responsive. The Corps did not complete a site visit until 9/21/05 with JD dated 9/25/05. This process took 4 mo. from the initial delineation which is an extremely lengthy turnaround. Other JD’s have been taking less time. We were told that the Corps gives site visits to Env. Consultants as a priority over without over-burdening the Corps. This agency seems under-staffed if this is typical duration for site visits.”
- “Quickest permit turn around yet. Very timely.”
- “It might be helpful to offer some kind of program to help applicants become more educated as to which course to take towards project approvals. I’m referring mainly to mitigation options but also to options on avoiding impacting as well. Maybe seminars for surveyors engineers landscape architects soil scientists. I got my best advice from the Corps. I think I have received poor advice from private consultants.”
- “(Corps employee) of the Raleigh Office has been a great resource and is an asset to your organization. There was a 6-8 week delay in his site visits but I understand from him that the delays are from his office being under-staffed. We got out permits promptly as we have in the past whenever we deal with (Corps employee). He understands the regulations thoroughly. The voice mailboxes of most of the Regulations in Raleigh stay full continuously making it near impossible to leave someone a message.”
- “We have worked with (Corps employee) several times on various projects. He is very professional & is an excellent public servant & good regulator.”
- “Why do some people have to get permits and other don’t is this fair?”

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- "(Corps employee) has been great to work with. Very informative."
- "Wilmington District Corps of Engineers points-of-contact provided us outstanding responsiveness partnership and technical assistance. They performed as true professional."
- "Everything went well except the time it took to visit the site and make a determination. 90 + days of waiting is definitely not acceptable."
- "The chief of the Raleigh Regulatory Office should be able to sign minor modifications without having to send to Wilmington."
- "Both (Corps employees) were great! Helpful! Courteous! Knowledgeable!
- "(Corps employee) has been very responsive and reasonable to deal with on those projects we have requested permits for. The same cannot be said for the representative which was in that position prior to his arrival. Thank you for the improvement."
- "Very helpful."
- "(Corps employee) was helpful in providing all info I needed and expedited processing of my permit. He also returned my calls in a reasonable time and was courteous."
- "The willingness of Corps Regulatory officials to meet with the project design team regularly during the design development process was invaluable. As a result of Corps recommendations impacts were minimized and incorporated into the design early in the process."
- "We experienced no difficulties with your agency. We did experience delays for NCDENR/Mitchell County appreciates your help doing the permitting process to repair flood damage. Also (Corps employee) was very helpful during the time I worked in McDowell County."
- "Be correct in your determinations. Know your rules prior to telling your customers."

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Anchoring the Clean Water Act

Congress's Constitutional Sources of Power
To Protect the Nation's Waters

An Environmental Law Institute White Paper*

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Executive Summary

Supreme Court rulings handed down in 2001 (*SWANCC)* and 2006 (*Rapanos*) have cast doubt on the scope of coverage that Congress intended when it enacted the Clean Water Act. Despite these rulings, any restrictions that the Court has imposed on the Act derive from the Court's own interpretation of Congressional intent in 1972, when Congress used the terms "navigable waters" and "waters of the United States" to characterize federal jurisdiction under the Act. Neither Supreme Court case reaches, much less decides, the underlying constitutional question: what is the scope of Congress's constitutional authority to protect the Nation's waters?

As a result, Congress remains free to convey, through a "clear statement," the scope it intends (and originally intended) for the Clean Water Act. An amendment recently introduced in the House of Representatives would restate and clarify Congress's intent to regulate the waters of the United States to the fullest extent of its legislative power. But if Congress amends the Act in this manner, which constitutional powers could it rely on, and what has the Supreme Court said about these powers? This white paper is offered to help inform the debate on this fundamental question.

The Constitution makes no express grant of power to regulate the Nation's waters. However, the Constitution does vest in Congress powers that for many years Congress has used to address issues that are national in scope—including management of waterways, flood control, and water pollution. Traditionally, Congress's most important constitutional power for purposes of water protection has been the ***power to regulate interstate commerce***. Other key sources of authority include the ***treaty power***, Congress's ***power over federal property***, and the ***spending power***. Congress also possesses the power to make all laws that are ***necessary and proper*** for carrying out its other powers.

The Commerce Clause has served as the basis for nearly every major environmental and public health law passed by Congress, including the Clean Water Act. Despite repeated legal challenges to the constitutionality of these laws—including laws that of necessity regulate local, intrastate activities affecting land and water resources—neither the Supreme Court nor federal appellate courts have ever struck down an environmental statute as exceeding Congress's commerce power. Instead, the courts have reaffirmed that the Commerce Clause authorizes Congress to engage in three general categories of regulation: direct regulation of the "channels" of interstate commerce; regulation of the "instrumentalities" of interstate commerce, and persons or things in interstate commerce; and regulation of "activities that substantially affect interstate commerce."

The jurisdictional term currently used in the Clean Water Act, "navigable waters," has primarily been interpreted by courts as an exercise of Congress's authority to regulate the "channels" of commerce. Even under this "channels" rationale, however, Congress is not merely limited to preserving navigability. Other important, traditional aspects of commercial regulation recognized by the case law include flood protection and watershed development, as well as the authority to keep the channels of commerce free from "injurious uses," like pollution. And the Supreme Court has long emphasized that protecting a body of water necessarily requires safeguarding its non-navigable tributaries, leading almost all courts to continue to uphold federal protection of streams and wetlands, both before and after the Court's more recent rulings.

Congress also possesses independent authority under the Commerce Clause to regulate activities that "substantially affect" interstate commerce. Many federal economic, health, and labor laws rest on this power, even where the regulated behavior occurs within an individual state and has no link to the channels of commerce. In the famous case of *Wickard v. Filburn*, for example, the Supreme Court upheld federal quotas on wheat production, even as applied to a farmer who grew wheat solely for personal consumption on his small farm. Although Mr. Filburn's harvest was "trivial by itself," it and similar harvests had an impact on Congress's larger national program, and could be regulated.

Most recently, in *Gonzales v. Raich*, the Court applied the same reasoning to uphold the federal ban on marijuana, despite California residents' claim that they used marijuana only for medicinal purposes allowed under state law, that it was grown wholly within the state, and that it was neither bought nor sold. In *Raich*, as in *Wickard*, the Court ruled that the Commerce Clause clearly allows Congress to reach even this limited, intrastate use. In so holding, it showed great deference to Congress's fact-finding and legislative judgment: "We need not determine whether [medical marijuana] activities, taken in the aggregate, substantially affect interstate commerce in fact, but only whether a 'rational basis' exists for so concluding." Key to the Court's decision in *Raich* was the fact that the relevant federal law was "a lengthy and detailed statute creating a comprehensive framework" for regulation.

Similarly, the Clean Water Act and most other federal environmental statutes establish comprehensive schemes to regulate instances of economic behavior that, either individually or in the aggregate, substantially affect interstate commerce. Discharges of pollutants or fill material into streams and wetlands occur almost *exclusively* as a result of industrial and commercial operations, such as manufacturing, construction, resource extraction, land development, agriculture, and waste disposal.

The Supreme Court has long acknowledged Congress's power to protect the natural environment from these activities that substantially affect commerce. In *Hodel v. Virginia Surface Mining and Reclamation Association*, the Court applied the same "rational basis" test to uphold the federal statute that covers all surface coal-mining activities, including land-based operations at intrastate sites. Likewise, the federal courts of appeals have unanimously upheld the Endangered Species Act, widely thought to be the most far-reaching federal environmental law; and sustained the Superfund statute's detailed federal regulation of the impacts of individual, intrastate hazardous waste sites on land or water.

In light of these strong environmental precedents, pollution or destruction of so-called "isolated," intrastate wetlands, small headwater streams, and other similar waters could be shown to affect interstate commerce and justify federal protection. A principled reading of the relevant cases—from *Wickard* through *Hodel* and *Raich*—suggests that a comprehensive legislative scheme to protect all of the Nation's waters on the "substantial effects" ground should be upheld as constitutional. Congress could reinforce this conclusion by making express factual findings on the importance of protecting even intrastate streams and wetlands for their substantial effects on interstate commerce.

In addition to the Commerce Clause, exercising the "fullest extent" of Congress's legislative power to regulate the Nation's waters would likely draw on at least three other sources of constitutional authority, without regard to implications for interstate commerce. Congress's treaty power, under the landmark case of *Missouri v. Holland*, provides an independent basis for regulating "isolated" wetlands or similar bodies of water as a means of implementing existing international obligations of the United States to safeguard migratory birds and their habitat. Additionally, Congress can protect water resources located on federal lands by exercising its authority under the Property Clause, which grants the federal government "the powers both of a proprietor and of a legislature" as to those lands—powers that extend to conduct occurring on non-federal lands that affects federal lands and their resources. Finally, under the Spending Clause, Congress may expressly condition the grant of federal funds on states' agreement to protect certain categories of waters.

Anchoring the Clean Water Act

Congress's Constitutional Sources of Power
To Protect the Nation's Waters

Introduction

Two badly divided Supreme Court rulings on the scope of the Clean Water Act have left lower courts, legal scholars, federal agencies, NGOs, and developers to grapple with difficult practical questions: Are so-called "isolated" or remote wetlands covered by the Act? What about headwater streams and similar tributaries, and other waters that are vitally important, but may be miles away from larger lakes, rivers, and estuaries, or run intermittently or seasonally? What constitutes a "significant nexus" to navigable waters?

As a legal matter, determining which water bodies are protected by the Clean Water Act depends on two things: first, Congress's intent in passing the Act, as evidenced by its language, structure, and legislative history; and second, the nature of the constitutional provisions that give Congress power to legislate to protect the Nation's waters. The Supreme Court decisions to date have been concerned with only the first of these two considerations, attempting to divine the intent of Congress when it passed the modern Clean Water Act in 1972 and amended it in 1977 and 1987.

But what if Congress were to resolve the question of "intent" once and for all by again amending the Clean Water Act, this time to make clear that it intends to protect the Nation's waters to the fullest extent of its legislative power under the Constitution? Legislation that would accomplish just this was recently introduced in the 110th Congress.[1] This ELI white paper identifies the constitutional powers Congress can rely on, and discusses what the Supreme Court has said about these powers. The following analysis is intended to inform the debate on the fundamental—but often misunderstood—area of law where protection of the Nation's waters meets the Constitution.

I

Overview of Congress's Constitutional Sources of Power To Protect the Nation's Waters

The Constitution makes no express grant of power to regulate the Nation's waters. However, the Constitution *does* vest in Congress powers that for many years Congress has used to address issues that are national in scope—including management of waterways, flood control, and water pollution. These powers, together with Congress's additional authority to employ all "necessary and proper" means of carrying them out, form the constitutional basis on which Congress has legislated, and can continue to legislate, a comprehensive program of protection for all the Nation's waters, including its many streams and wetlands.

Traditionally, Congress's most important power for purposes of water protection has been the power to regulate interstate commerce, granted by the Commerce Clause.[2] This broad power—which includes Congress's authority to regulate activities, even purely intrastate activities, that substantially affect commerce—has a rich history that underlies most federal legislation and regulation. Accordingly, it is the primary focus of this white paper.

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[1] Clean Water Restoration Act, H.R. 2421 (2007).

[2] U.S. Constitution, article I, section 8.

Also significant, however, and gaining renewed attention, are: the treaty power, which derives from the Senate's power of advice and consent to the President in the making of international treaties;[3] Congress's power to manage all federal property, articulated in the Property Clause;[4] and Congress's spending power, contained in the Spending Clause.[5] This paper addresses the treaty power for its general utility in implementing international agreements to which the United States is a party that provide a basis for protecting wetlands and other waters. The property power and spending power are equally important but more specialized, and detailed treatment of them is beyond the scope of this paper.

In addition to these enumerated powers, the Constitution grants Congress the further power "[t]o make all Laws which shall be necessary and proper" for executing its enumerated powers and all other powers vested by the Constitution in the U.S. Government.[6] This Necessary and Proper Clause has always been crucial to Congress's effectiveness. As early as 1819, Chief Justice John Marshall wrote for a unanimous Supreme Court: "[l]et the end be legitimate, let it be within the scope of the constitution, and all means which are appropriate, which are plainly adapted to that end, which are not prohibited, but consist with the letter and spirit of the constitution, are constitutional."[7]

The nature and scope of Congressional powers have been the subject of Supreme Court decisions dating to the earliest days of the Republic. Although questions persist even today about the precise reach of these individual powers, case law establishes that Congress possesses very broad constitutional authority to regulate the Nation's waters, particularly if it does so through a comprehensive legislative scheme like the Clean Water Act.

II

The Commerce Clause—Cornerstone of Environmental Law

A. The Basics. Article I, Section 8 of the Constitution grants Congress the power "[t]o regulate Commerce . . . among the several States."[8] Federal legislative authority over interstate commerce is plenary, which means it is "complete in itself, may be exercised to its utmost extent, and acknowledges no limitations other than are prescribed in the constitution."[9]

The Commerce Clause has served as the basis for nearly every major environmental and public health law passed by Congress, including the Clean Water Act. Despite repeated legal challenges to the constitutionality of these laws—including laws that of necessity regulate local, intrastate activities affecting land and water resources—neither the Supreme Court nor federal appellate courts have ever struck down an environmental statute as exceeding Congress's power under the Commerce Clause.[10]

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[3] U.S. Constitution, article II, section 2.
[4] U.S. Constitution, article IV, section 3.
[5] U.S. Constitution, article I, section 8.
[6] U.S. Constitution, article I, section 8.
[7] *M'Culloch v. Maryland*, 17 U.S. 316, 421 (1819).
[8] U.S. Constitution, article 1, section 8.
[9] *Gibbons v. Ogden*, 22 U.S. 1, 75 (1824) (Chief Justice Marshall).
[10] *See, e.g., Hodel v. Virginia Surface Mining and Reclamation Association, Inc.*, 452 U.S. 264, 283 (1981) (upholding Surface Mining Control and Reclamation Act); *Alabama-Tombigbee Rivers Coalition v. Kempthorne*, 477 F.3d 1250, 1273 (11th Cir. 2007) (joining three other Circuits in upholding Endangered Species Act: *GDF*

Nor is environmental law unique in the field of Commerce Clause legislation and jurisprudence. Over the last century, Congress has successfully relied on its Commerce Clause authority to respond to a variety of societal ills, including race discrimination in public accommodations and restaurants,[11] loan-sharking (and a vast array of other fraudulent or criminal activities),[12] employer wage-and-hour abuses,[13] trade in unsafe food products,[14] and unfair labor practices targeting unions.[15]

It may seem counter-intuitive that Congress would try to address national issues such as water degradation or race discrimination by invoking a general constitutional provision that deals with commerce. Yet the Supreme Court has made clear that Congress is free under the Commerce Clause to legislate not only against economic problems, but also against public health problems[16] and moral and social problems, so long as those problems also are a burden on interstate commerce.[17] And the Necessary and Proper Clause gives Congress great flexibility to legislate the means needed to exercise its commerce power effectively.

It is well-settled, and the Supreme Court has recently reaffirmed, that the Commerce Clause authorizes Congress to engage in three general categories of regulation. First, Congress can directly regulate the "channels" of interstate commerce (such as highways and rivers); second, Congress can regulate the "instrumentalities" of interstate commerce, and persons or things in interstate commerce; and third, Congress can regulate "activities that substantially affect interstate commerce."[18] For purposes of clean water legislation, the "channels" prong and the "substantial effects" prong are particularly important.[19]

B. The Clean Water Act—Regulating "Navigable Waters" Based on the Commerce Clause. The Clean Water Act, as written, asserts federal jurisdiction over "navigable waters."[20]

Realty Investments v. Norton, 326 F.3d 622 (5th Cir. 2003), *Rancho Viejo, LLC v. Norton,* 323 F.3d 1062 (D.C. Cir. 2003), *Gibbs v. Babbitt,* 214 F.3d 483 (4th Cir. 2000), and *National Association of Homebuilders v. Babbitt,* 130 F.3d 1041 (D.C. Cir. 1997)); *Nebraska v. EPA,* 331 F.3d 995, 998 (D.C. Cir. 2003) (upholding Safe Drinking Water Act); *United States v. Olin Corp.,* 107 F.3d 1506, 1510 (11th Cir. 1997) (upholding CERCLA "Superfund" hazardous waste law).

[11] *E.g., Heart of Atlanta Motel, Inc. v. United States,* 379 U.S. 241, 254-58 (1964), and its companion case, *Katzenbach v. McClung,* 379 U.S. 294, 304-05 (1964) (upholding Title II of the Civil Rights Act of 1964).

[12] *E.g., Perez v. United States,* 402 U.S. 146, 146-47 (1971) (upholding Consumer Credit Protection Act).

[13] *E.g., United States v. Darby,* 312 U.S. 100, 122-23 (1941) (upholding Fair Labor Standards Act); *Garcia v. San Antonio Metropolitan Transit Authority,* 469 U.S. 528, 555-56 (1985) (rejecting state claim of Tenth Amendment immunity from Fair Labor Standards Act).

[14] *E.g., United States v. Carolene Products Company,* 304 U.S. 144, 147-48 (1938) (upholding Filled Milk Act).

[15] *E.g., National Labor Relations Board v. Jones & Laughlin Steel Corp.,* 301 U.S. 1, 49 (1937) (upholding National Labor Relations Act).

[16] *See Carolene Products Company,* 304 U.S. at 147.

[17] *See Heart of Atlanta Motel,* 379 U.S. at 257 (1964).

[18] *Gonzales v. Raich,* 545 U.S. 1, 16-17 (2005).

[19] The second Commerce Clause prong, providing for regulation of "things in interstate commerce," offers another viable—though largely unexplored—basis for legislating water protections. Not only are chemicals and other pollutants that move in interstate commerce clearly subject to federal regulation, the Supreme Court also has squarely ruled that water itself is "an article of commerce." *See Sporhase v. Nebraska, ex rel. Douglas,* 458 U.S. 941, 954 (1982) (in the groundwater context).

[20] *E.g.,* 33 U.S.C. § 1251(a), CWA § 101(a) (goals and policies); 33 U.S.C. § 1313(c)(2)(A), CWA § 303(c)(2)(A) (requirement of water quality standards); 33 U.S.C. § 1344(a), CWA § 404(a) (issuance of permits for the discharge of dredged or fill material); and 33 U.S.C. § 1362(12), CWA § 502(12) (defining "discharge of a pollutant").

The Act defines "navigable waters" as "waters of the United States, including the territorial seas."[21] The phrase "waters of the United States" is not further defined.

Despite the voluminous and sometimes complex case law and scholarship interpreting these statutory terms, the history of Clean Water Act jurisdiction is easily understood in terms of two distinct eras: the long period following passage of the Act and pre-dating the Rehnquist Court's decision in *Solid Waste Authority of Northern Cook County v. U.S. Army Corps of Engineers*,[22] or "*SWANCC*" (1972-2001); and the current post-*SWANCC* era (2001-present).

*1. The Pre-*SWANCC *Era (1972-2001)*

The term "navigable waters" appears nowhere in the Constitution. However, Congress has historically employed this term to invoke its Article I power to regulate commerce among the states, and has applied that power to navigable waters since the nineteenth century.[23] Thus, there has never been a doubt that during the twentieth century Congress used this power to enact the successive Federal Water Pollution Control Acts, culminating in the 1972 version now known as the Clean Water Act.

Nor was there any doubt that by 1972, Congress intended to regulate much more broadly than in any previous federal water legislation. The legislative history of the Act establishes that the "major" purpose of the new law was "to establish a comprehensive long-range policy for the elimination of water pollution."[24] For example, Senator Jennings Randolph of West Virginia said that "[i]t is perhaps the most comprehensive legislation that the Congress of the United States has ever developed in this particular field of the environment."[25]

As soon as the law passed, the Environmental Protection Agency articulated an appropriately comprehensive view of its regulatory authority.[26] When the U.S. Army Corps of Engineers failed to follow suit,[27] defining "waters of the United States" to cover only traditional navigable waters, a federal court revoked the Corps' definition.[28] That court wrote that by re-defining "navigable waters" as it had done in the 1972 Act, Congress had "asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution. Accordingly, as used in the Water Act, the term is not limited to the traditional tests of navigability."[29] The Corps quickly enacted appropriate new regulations.[30] The two agencies' parallel regulatory definitions of "waters of the United States" have remained largely unchanged since the 1970s.[31]

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[21] 33 U.S.C. § 1362(7), CWA § 502(7).

[22] 531 U.S. 159 (2001).

[23] *See, generally, e.g.,* William W. Sapp, *et al.*, "From the Fields of Runnymede to the Waters of the United States: A Historical Review of the Clean Water Act and the Term 'Navigable Waters,'" 36 *Environmental Law Reporter* 10190, 10191 (2006).

[24] S. Rep. No. 92-414 at 95 (Oct. 28, 1971).

[25] 117 Cong. Rec. 38,797 (Nov. 2, 1971).

[26] *E.g.*, 38 Fed. Reg. 13527, 13529 (May 22, 1973) (broadly defining "navigable waters" for purposes of Section 402); 38 Fed. Reg. 10834 (May 2, 1973) (wetlands policy).

[27] *E.g.*, 39 Fed. Reg. 12115 (April 3, 1974) (narrowly defining "navigable waters" for purposes of Section 404).

[28] *Natural Resources Defense Council v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975).

[29] *Id.*

[30] *See* 40 Fed. Reg. 31,319 (July 25, 1975 interim final rule); 42 Fed. Reg. 37,122 (July 19, 1977 final rule). *See also, e.g.*, Sapp, *supra* note 24, at 10204-07 (discussing the Corps's responses to the 1972 Act and the *Callaway* ruling).

[31] *See* 33 C.F.R § 328.3(a) (Corps definition for Section 404 program); 40 C.F.R. § 230.3(s) (EPA definition for Section 404 program); 40 C.F.R. § 122.2 (EPA definition for Section 402 program).

When the Clean Water Act was amended in 1977, Congress continued to view the law as sweeping. For example, Senator Howard Baker of Tennessee said that "[t]he once seemingly separate types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the *entire resource*."[32]

Likewise, the Supreme Court during this era harbored no doubts about the scope of Clean Water Act jurisdiction. In one of its first cases interpreting the Act, the Court noted that Congress's intent "was clearly to establish an all-encompassing program of water pollution regulation."[33] And in the landmark 1985 *Riverside Bayview* decision, a unanimous Court upheld jurisdiction over "adjacent wetlands," finding that Congress, in re-defining the term "navigable waters" to mean "waters of the United States," had intended that the historical word "navigable" be "of limited import."[34] The Court said that Congress meant to "repudiate limits that had been placed on federal regulation by earlier water pollution control statutes," and use its constitutional authority to regulate "at least some waters that would not be deemed 'navigable' under the classical understanding of that term."[35]

Two years later, the Court would recognize that the Clean Water Act applies to "virtually all bodies of water"[36]—a view by then long reflected in EPA and Corps regulations. (In practice, however, then as now, the Corps grants nearly all permit requests,[37] and the two agencies have established permitting rules that impose only modest requirements, or none at all, on low-impact development in regulated waters.[38])

In sum, for nearly the first three decades of its existence, the Clean Water Act was broadly understood to provide comprehensive federal protections for virtually all bodies of water throughout the United States—the navigable rivers and seas as well as the headwaters, intermittent and ephemeral streams, and intrastate wetlands and other waters that are critical to the health of the Nation's interconnected aquatic ecosystems.

2. SWANCC *and the Post-*SWANCC *Era (2001-present)*

In 2001, the Supreme Court for the first time cast doubt on this long-held understanding about the comprehensive nature of Clean Water Act coverage. In a narrow 5-4 ruling in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers,*[39] the Court now concluded that Congress had not intended the Act to reach "isolated ponds, some only seasonal" that were located wholly within one state, where the only asserted basis for federal jurisdiction was their use as habitat by migratory birds.[40] While continuing to acknowledge *Riverside Bayview*'s treatment of the word "navigable" in the Act as being of "limited import," then-Chief Justice William Rehnquist asserted that "[t]he term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the [Clean Water Act]: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made."[41] In a sharp dissent, Justice John Paul Stevens argued that the decision flatly ignored the Act's language, legislative history, and a nearly thirty-year record of executive branch and judicial interpretation—including the Court's own decision in *Riverside Bayview*.[42]

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[32] 123 Cong. Rec. 26,718 (Aug. 4, 1977) (emphasis added).

[33] *Milwaukee v. Illinois*, 451 U.S. 304, 318 (1981).

[34] *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 133 (1985).

[35] *Id.*

[36] *International Paper Co. v. Ouellette*, 479 U.S. 481, 492 (1987).

[37] For example, the Corps received an average of 74,500 Section 404 permit requests each year from 1996 to 1999, and only three-tenths of one percent (0.3%) were denied. *See EPA's Clean Air Budget and the Corps of Engineers Wetlands Budget: Hearing Before the Subcomm. on Clean Air, Wetlands, Private Property, and Nuclear Safety of the Senate Comm. on Environment and Public Works*, 106th Cong., at 2 (2000) (testimony of Michael Davis, Deputy Assistant Secretary of the Army for Civil Works).

[38] Section 404 permits can be individual or general. *See* 33 U.S.C. § 1344(e), CWA § 404(e) (general permits on state, regional, or nationwide basis). The decision to issue a general permit represents nearly 9 out of 10 permitting decisions made by the Corps. *See* Corps Fiscal Year 2003 Regulatory Statistics, available online at http://www.usace.army.mil/cw/cecwo/reg/2003webcharts.pdf. The Corps recently reissued all of its existing Nationwide Permits (NWPs) and also issued new ones. *See Reissuance of Nationwide Permits; Notice*, 72 Fed. Reg. 11092 (March 12, 2007).

[39] 531 U.S. 159 (2001).

The Court did not decide *SWANCC* on constitutional grounds, but it ruled with an eye on the Commerce Clause. Rehnquist wrote that absent a "clear statement" from Congress that it had intended to reach the "isolated"[43] waters at issue, the *SWANCC* majority would interpret the Act so as "to avoid the significant constitutional and federalism questions" that might be raised by assuming Congress had in fact meant to regulate to the fullest extent of its commerce power.[44] Despite Rehnquist's concerns, however, lower courts interpreting *SWANCC* in the years that followed declined to pick up the constitutional cudgel.

Last year, in *Rapanos v. United States*,[45] the new Roberts Court took its first look at the scope of the Clean Water Act—this time in the context of wetlands adjacent to tributaries that are not themselves navigable. The Court fractured over its interpretation of the Act, issuing five opinions, none commanding a majority, and coming up with two very different jurisdictional tests.[46] Significantly, as in *SWANCC*, the Court again declined to rule on the extent of Congress's constitutional authority to legislate under the Commerce Clause—despite invitations from several parties to do so. The main impact of the *Rapanos* Court's "clarification" of the statute has been to leave Clean Water Act jurisdiction in disarray, with the implementing agencies, legal scholars, and the regulated community struggling to sort things out.[47]

Thus, notwithstanding the rulings issued by the Supreme Court in *SWANCC* and *Rapanos*, any restrictions they imposed on the Clean Water Act is based on the Court's present understanding of Congressional intent in 1972, when Congress used the terms "navigable waters" and "waters of the United States" to characterize federal jurisdiction under the Act. Neither *SWANCC* nor *Rapanos* reaches, much less decides, the underlying constitutional question: namely, *what is the scope of Congress's constitutional authority to protect the Nation's waters?* So regardless of prior disagreements about statutory interpretation or Congressional intent, Congress remains free to convey, through a "clear statement," the scope it intends (and originally intended) for the Act.

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[40] *Id.* at 162, 171-72.

[41] *Id.* at 172.

[42] *Id.* at 176-77 (Stevens, J., dissenting).

[43] The word "isolated" is placed in quotes throughout this white paper because, although the term was used in *SWANCC* to denote waters or wetlands located far from and geographically separated from waters traditionally understood as navigable, it has no scientific or ecological meaning. Wetland ecologists do not concede that any wetland is properly understood as "isolated."

[44] *Id.* at 173-74; *cf. United States v. Wilson*, 133 F.3d 251, 256 (4th Cir. 1997) ("However, we need not resolve these difficult questions about the extent and limits of congressional power to regulate nonnavigable waters to resolve the issue before us.").

[45] 126 S. Ct. 2208 (2006).

[46] *See generally id.*

[47] *See, e.g.*, U.S. Army Corps of Engineers/Environmental Protection Agency Joint Guidance Document on *Rapanos* (June 5, 2007); James Murphy, "Rapanos v. United States: Wading Through Murky Waters," Nat'l Wetlands Newsl., Sept-Oct 2006, at 1; Latham & Watkins LLP, Client Alert: "A Divided US Supreme Court Offers Disparate, Sweeping Opinions as to the Reach of the Federal Clean Water Act—Rapanos and Carabell," available online at http://www.lathamandwatkins.com/Resources.aspx?page=ArticleDetail&practice=217&publication=1586&searchtype=Articles.

C. Regulating the "Channels" of Commerce. As noted above, an essential aspect of Congress's Commerce Clause power is its authority to regulate the "channels" of interstate commerce.[48] Although Congress has a long history, which the Supreme Court has consistently upheld, of exercising this power in aid of "navigation,"[49] the channels power is by no means limited to preserving navigability.[50] Navigation is only one aspect of interstate commerce via the Nation's waters; other important, traditional means of commercial regulation include flood protection and watershed development,[51] as well as the authority to keep the channels of commerce free from "injurious uses," including pollution.[52] As applied to water pollution control, these various aspects of channels regulation are mutually reinforcing: "water pollution is . . . a direct threat to navigation—the first interstate commerce system in this country's history and still a very important one."[53]

Federal authority to regulate the channels of water-related commerce does not cease at the river's edge—nor has it ever. The 1899 Refuse Act, for example, made illegal the unauthorized discharge of materials into "any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water . . . or on the bank of any tributary."[54] And the Supreme Court has emphasized that protecting a body of water necessarily requires safeguarding its non-navigable tributaries:

> [T]he power of flood control extends to the tributaries of navigable streams. For just as control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions, so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries.[55]

Not surprisingly, this language and reasoning are evident throughout the cases interpreting the Clean Water Act, from 1972 to the present.[56]

Just last year in *Rapanos*, in a concurring opinion that most commentators agree to be controlling, Justice Anthony Kennedy made clear that Congress's authority to regulate under the channels rationale remains far-reaching. Specifically, he argues that his interpretation of the Clean Water Act as requiring proof of a "significant nexus"—which assesses how a particular wetland or stream ultimately affects the quality of traditional navigable waters—raises no federalism or Commerce Clause issues.[57] His citations to prior cases imply that his analysis relies primarily on the channels approach to the Commerce Clause, as augmented by the Necessary and Proper Clause.[58]

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[48] *See Raich*, 545 U.S. at 16-17.

[49] *E.g.*, *The Daniel Ball*, 77 U.S. 557, 563 (1870) (defining "navigable in fact"); *Economy Light Co. v. United States*, 256 U.S. 113 (1921) (holding that when once found to be navigable, a waterway remains so); *United States v. Appalachian Electric Power Co.*, 311 U.S. 377, 407-09 (1940) (holding that determination of a waterway's susceptibility to use in commerce includes considering the effects of reasonable improvements).

[50] *Appalachian Electric Power Co.*, 311 U.S. at 426.

[51] *Id.*

[52] *E.g.*, *United States v. Deaton*, 332 F.3d 698, 706-07 (4th Cir. 2003), *citing Caminetti v. United States*, 242 U.S. 470, 491 (1917).

[53] *United States v. Ashland Oil and Transportation Co.*, 504 F.2d 1317, 1325-26 (6th Cir. 1974).

[54] Rivers and Harbors Act of 1899, ch. 425, §13, 30 Stat. 1121, 1152 (1899) (codified as amended at 33 U.S.C. § 407).

[55] *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 525-26 (1941).

[56] *E.g.*, *Ashland Oil*, 504 F.2d at 1327 (1974); *Rapanos*, 126 S.Ct. at 2249-50 (Kennedy, J., concurring in the judgment) (2006).

[57] *See id.* at 2249 (Kennedy, J., concurring in the judgment). Justice Kennedy's test does not even require a wetland to be hydrologically connected to traditional navigable waters in order for it to come within Clean Water Act

But in addition to this clear authority to regulate streams and wetlands under a "channels" rationale, Congress also can protect the Nation's waters based on its well-settled authority to regulate activities that "substantially affect" interstate commerce. Under the "substantially affects" rationale, Congress need not link protections back to navigable waters.

D. Regulating Activities that "Substantially Affect" Commerce. Congress has the authority to regulate activities that "substantially affect" interstate commerce, either to supplement its authority over "channels," discussed above, or as a wholly independent ground. Many federal economic, health, and labor laws rest on this power, even where the regulated behavior occurs within an individual state and has no link to the channels of commerce.

In the famous *Wickard v. Filburn* case, the Supreme Court upheld federal quotas on wheat production, even as applied to a farmer who grew wheat solely for personal consumption on his small farm. On behalf of a unanimous Court, Justice Robert Jackson wrote that "even if [Mr. Filburn's] activity be local and though it may not be regarded as commerce, it may still, whatever its nature, be reached by Congress if it exerts a substantial economic effect on interstate commerce."[59] Although Mr. Filburn's harvest was "trivial by itself," it and similar harvests had an impact on Congress's larger national program: "Home-grown wheat in this sense competes with wheat in commerce."[60]

Most recently, the Court applied this reasoning to uphold the federal ban on marijuana, despite California residents' claim that they used marijuana only for medicinal purposes allowed under state law, that it was grown wholly within the state, and that it was neither bought nor sold. In *Gonzales v. Raich*, as in *Wickard*, the Court ruled that the Commerce Clause clearly allows Congress to reach even this limited, intrastate marijuana use: "when 'a general regulatory statute bears a substantial relation to commerce, the *de minimis* character of individual instances arising under that statute is of no consequence.'"[61] In so holding, it showed great deference to Congress's fact-finding and legislative judgment in enacting the Controlled Substances Act: "We need not determine whether [medical marijuana] activities, taken in the aggregate, substantially affect interstate commerce in fact, but only whether a 'rational basis' exists for so concluding."[62]

Key to the Court's decision in *Raich* was the fact that the Controlled Substances Act is "a lengthy and detailed statute creating a comprehensive framework" for regulation.[63] Unlike earlier Rehnquist Court cases that invalidated narrow federal attempts to regulate non-economic, largely criminal behavior,[64] the *Raich* Court found that the Act as a whole governs both legal and illegal drug manufacture, distribution, and use—activities that are "quintessentially economic."[65] Given this broad enactment, even Justice Antonin Scalia concurred in upholding Congress's power to

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coverage. Due to wetlands' ability to filter pollutants, hold back flood waters, and store runoff, it may in fact be the *absence* of such a connection that shows their significance for the aquatic system. *Id.* at 2250.

[58] *Id.* at 2249-50.

[59] *Wickard v. Filburn*, 317 U.S. 111, 125 (1942).

[60] *Id.* at 1127-28.

[61] *See Raich*, 545 U.S. at 17 (quoting *Maryland v. Wirtz*, 392 U.S. 183, 196, n. 27 (1968)).

[62] *Id.* at 22.

[63] *Id.* at 24.

[64] *United States v. Lopez*, 514 U.S. 549 (1995) (handgun possession near schools); *United States v. Morrison*, 529 U.S. 598 (2000) (violence against women).

[65] *Raich*, 545 U.S. at 3.

regulate intrastate activities with substantial effects on interstate commerce, though he grounded this power in the Necessary and Proper Clause rather than the Commerce Clause alone.[66]

Like the statutes at issue in *Wickard* and *Raich*, the Clean Water Act and most other federal environmental laws establish comprehensive schemes to regulate instances of economic behavior that, either individually or in the aggregate, substantially affect interstate commerce. Discharges of pollutants or fill material into streams and wetlands occur almost *exclusively* as a result of industrial and commercial operations, such as manufacturing, construction, resource extraction, land development, agriculture, and waste disposal.

The Supreme Court has long acknowledged that Congress can use the "substantial effects" prong of the commerce power to protect the natural environment from these activities. In *Hodel v. Virginia Surface Mining and Reclamation Association*, the Court applied the same "rational basis" test to uphold the federal statute that covers all surface coal-mining activities, including land-based operations at intrastate sites.[67] Likewise, the federal courts of appeals have unanimously upheld the Endangered Species Act, widely thought to be the most far-reaching federal environmental law, against various Commerce Clause challenges;[68] and sustained the Superfund statute's detailed federal regulation of the impacts of individual, intrastate hazardous waste sites on land or water.[69]

In light of these strong environmental precedents, pollution or destruction of "isolated," intrastate wetlands and other similar waters could be shown to affect interstate commerce and justify federal protection—based both on the typically commercial reasons for filling them and their inherent economic value.[70] As discussed above, the *SWANCC* Court declined to reach this question, instead finding (despite extensive legislative history) that Congress had not made a clear statement of intent to reach these waters. Most lower courts grappling with *SWANCC* also have skirted the issue, and rested Clean Water Act jurisdiction on the statutory language or the "channels" prong of the Commerce Clause. But such a distinguished conservative jurist as Judge Richard Posner has suggested that the "substantial effects" test provides an entirely separate constitutional basis for regulation of water, including non-navigable wetlands and streams:

> In fact navigability is a red herring from the standpoint of constitutionality. The power of Congress to regulate pollution is not limited to polluted navigable waters; the pollution of groundwater, for example, is regulated by federal law . . . because of its effects on agriculture and other industries whose output is shipped across state lines, and such regulation has been held to be authorized by the commerce clause.[71]

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[66] Indeed, following this theory to its logical conclusion, Scalia's concurrence states that the Necessary and Proper power may extend *beyond* economic activity: ". . . Congress may regulate even noneconomic local activity if that regulation is a necessary part of a more general regulation of interstate commerce." *Id.* at 34 (Scalia, J., concurring).

[67] *Hodel*, 452 U.S. at 276-80 (Surface Mining Control and Reclamation Act).

[68] *See* cases cited in note 11, *supra.*

[69] *E.g., Freier v. Westinghouse Electric Corp.*, 303 F.3d 176 (2nd Cir. 2002); *United States. v. Olin Corp.*, 107 F.3d 1506 (11th Cir. 1997).

[70] A good example is provided by the "prairie pothole," a form of shallow wetland that is often seasonal. The prairie pothole region is one of critical importance to economically valuable wildlife and water quality, covering nearly 350,000 square miles, including portions of Iowa, Minnesota, Montana, North Dakota, and South Dakota, plus parts of Canada. Gleason, R.A, *et al., Potential of Restored Prairie Wetlands in the Glaciated North American Prairie to Sequester Atmospheric Carbon, Plains CO2 Reduction Partnership* (Aug. 2005) at 4. The region produces at least half of America's waterfowl. U.S. Geological Survey, Northern Prairie Wildlife Research Center, *Prairie Basin Wetlands in the Dakotas: A Community Profile*, at 1.

[71] *United States v. Gerke Excavation, Inc.*, 412 F.3d 804, 807 (7th Cir. 2005) (citations omitted).

Congress could further reinforce this conclusion by making express factual findings of the importance of protecting even intrastate streams and wetlands for their substantial effects on interstate commerce. For example, the Supreme Court in *Hodel* quoted with approval Congress's statutory finding that strip-mining substantially affects commerce by

> destroying or diminishing the utility of land for commercial, industrial, residential, recreational, agricultural, and forestry purposes, by causing erosion and landslides, by contributing to floods, by polluting the water, by destroying fish and wildlife habitats, by impairing natural beauty, by damaging the property of citizens, by creating hazards dangerous to life and property, by degrading the quality of life in local communities, and by counteracting governmental programs and efforts to conserve soil, water, and other natural resources.[72]

Since uncertainty remains as to where courts might focus their analysis in the clean water context,[73] any such findings would do well to elicit the "quintessentially economic" nature of the protected water resources, of the activities that benefit from them (*e.g.*, tourism, hunting), and of the activities that are threatening them (*e.g.*, industrial pollution, construction).

Along these lines, the current version of the proposed Clean Water Restoration Act recites both the commercial value of the protected waters themselves when taken in the aggregate, and the commercial value of the human activities that depend on them.[74] Congress of course is not required to make such findings, nor do they foreclose judicial review.[75] But their presence, coupled with the "rational basis" standard of review, should once again lead courts to defer to Congress's legislative judgment—especially in the context of a comprehensive environmental protection law.

In sum, Congress's Commerce Clause power to regulate activities, including purely intrastate activities, that substantially affect interstate commerce continues to be a robust source of constitutional authority. Although it is hard to say how individual justices on the Supreme Court would view regulation of certain waters under this—or any—rationale,[76] the fact remains that a principled reading of the relevant Commerce Clause cases—from *Wickard* through *Hodel* and *Raich*—suggests that a comprehensive legislative scheme to protect all of the Nation's waters should be upheld as constitutional.

III

Other Constitutional Bases for Environmental Protection

If Congress were to regulate the Nation's waters to the fullest extent of its legislative powers under the Constitution, it would be invoking at least three other sources of constitutional power—none of which implicates, or is limited by, the Commerce Clause. These include the Treaty Power, the Property Clause, and the Spending Power, each of which is introduced below.

A. The Treaty Power—Implementing International Obligations through Domestic Law. In the event that any so-called "isolated" wetland or similar body of water were to be deemed by a court to lie beyond the reach of federal regulation under the Commerce Clause, Congress's treaty power would provide an independent basis for regulation.[77]

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[72] *Hodel*, 452 U.S. at 277 (quoting the Surface Mining Control and Reclamation Act, 30 U.S.C. § 1201(c)).

[73] *Cf. SWANCC*, 531 U.S. at 173 ("For example, we would have to evaluate the precise object or activity that, in the aggregate, substantially affects interstate commerce. This is not clear . . . .").

[74] Clean Water Restoration Act §§ 3(1)-(13); *see also* Brief of Environmental Law Institute as *Amicus Curiae* Supporting Respondents at 22-25, *Rapanos v. United States*, No. 04-1034 (U.S. Supreme Court).

[75] *Morrison*, 529 U.S. at 612.

[76] *See, e.g., Rapanos*, 126 S.Ct. at 2246, 2249-50 (Kennedy, J., concurring in the judgment).

Article II, Section 2 of the Constitution establishes that the President of the United States "shall have power, by and with the advice and consent of the Senate, to make treaties, provided two thirds of the Senators present concur." This provision, taken together with the Necessary and Proper Clause power (discussed above) to implement federal authority, form what is known as the treaty power of Congress. And Article VI of the Constitution, the Supremacy Clause, provides that treaties, like the Constitution and federal laws, are the supreme law of the land.

The foreign affairs power of the United States government—including the power to make treaties—is not an "enumerated" power under the Constitution. Rather, it is inherent in the Nation's sovereignty.[78] This power is vested exclusively in the federal government,[79] and need not be exercised so as to conform to state laws or policies.[80] Nor are there limitations on either the purpose or subject matter of international agreements.[81]

Despite its breadth, the treaty power is not without limits. A treaty may not contravene an express constitutional prohibition,[82] and legislation passed to implement a treaty must bear a "rational relationship" to a permissible constitutional end.[83] Every treaty must be a bona fide international agreement—and not simply a "mock marriage" between nations designed to address the subject matter of the agreement.[84] And the fact that a super-majority (two-thirds) of the Senate is required to approve a treaty reflects not only a legislative check on the executive branch, but also a structural "federalism" opportunity for the states to have their say—and, indeed, for even a minority of states to block passage of a treaty altogether.

In the seminal case of *Missouri v. Holland*,[85] the state of Missouri argued that it owned all the wild birds within its borders, and that a federal game warden's efforts to enforce a new migratory bird treaty and federal regulations to protect migratory birds violated state sovereignty under the Tenth Amendment. Justice Oliver Wendell Holmes authored a short, powerful opinion rejecting the state's position and upholding the power of Congress to implement international treaties through domestic law, even where that law might not otherwise be authorized through Congress's enumerated powers.

"If the treaty is valid," Justice Holmes wrote, "there can be no dispute about the validity of the statute under Article 1, Section 8, as a necessary and proper means to execute the powers of the Government."[86] Describing the protection of migratory birds as "a national interest of very nearly the first magnitude," Justice Holmes found in favor of the federal government.[87] *Missouri v. Holland* remains good law, and the ruling supports the power of Congress to implement the existing international obligations of the United States to safeguard migratory birds and their ever-diminishing habitat, including aquatic habitat.

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[77] Recall that while the Supreme Court's 2001 *SWANCC* decision disapproved of federal regulation of waters based solely on their asserted use by migratory birds, that ruling depended on the Court's *statutory* interpretation of the Clean Water Act, and its finding that Congress had not clearly stated its intent to regulate to the full limits of the commerce power. The treaty power was not at issue in *SWANCC* and was never considered by the Court.

[78] *United States v. Curtiss-Wright Export Corporation*, 299 U.S. 304, 315-18 (1936).

[79] *United States v. Belmont*, 301 U.S. 324, 330 (1937).

[80] *United States v. Pink*, 315 U.S. 203, 233-34 (1942). *See also* Louis Henkin, *Foreign Affairs and the United States Constitution* 191 (2d ed. 1996) ("Since the Treaty Power was delegated to the federal government, whatever is within its scope is not reserved to the states: the Tenth Amendment is not material.").

[81] *See, e.g.*, Restatement (Third) of Foreign Relations Law of the United States § 302, cmt. c (1987).

[82] *Missouri v. Holland*, 252 U.S. 416, 432 (1920).

[83] *See United States v. Lue*, 134 F.3d 79, 84 (2nd Cir. 1998), *citing M'Culloch v. Maryland*, 17 U.S. 316 (1819).

[84] *See, e.g.*, Restatement (Third) of Foreign Relations Law of the United States § 302, Reporters' Note 2 (1987); Henkin, *supra* note 81, at 185.

[85] 252 U.S. 416 (1920).

[86] *Id.* at 432.

Specifically, the United States now is party to multiple treaties that protect migratory birds, including the following:[88]

- Migratory Bird Treaties with Canada, Mexico, Japan, and the former Soviet Union[89] (implemented domestically by the Migratory Bird Treaty Act);[90]
- The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, or "Western Convention"[91] (implemented domestically by the Endangered Species Act);[92]
- The Convention on International Trade in Endangered Species of Wild Fauna and Flora, or "CITES"[93] (implemented domestically by the Endangered Species Act);[94] and
- The Ramsar Convention (this convention is "self-executing").[95]

One example of the type of treaty provision that Congress might implement through the exercise of its treaty power appears in a 1996 protocol to the Migratory Bird Treaty between the United States and Canada, establishing that each government "shall use its authority to take appropriate measures to preserve and enhance the environment of migratory birds."[96]

Thus, under its treaty power, Congress possesses the constitutional authority to protect even "isolated" wetlands and similar waters as habitat for migratory birds—without regard to implications for interstate commerce.

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[87] *Id.* at 435.

[88] This list is intended simply to illustrate the types of treaties that may provide a basis for stream and wetlands protection, and is by no means exhaustive. Other international conventions to which the United States is party may also provide strong bases for water protection—for example, treaties addressing oceans and fisheries.

[89] *See* the Convention between the United States and Great Britain for the Protection of Migratory Birds in the United States and Canada, Aug. 16, 1916, U.S.-U.K., 39 Stat. 1702; the Convention between the United States and Mexico for the Protection of Migratory Birds and Game Mammals, Feb. 7, 1936, U.S.-Mex., 50 Stat. 131; the Convention between the Government of the United States and the Government of Japan for the Protection of Migratory Birds in Danger of Extinction, and their Environment, Mar. 4, 1972, U.S.-Japan, 25 U.S.T. 3329; and the Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and their Environment, Mar. 4, 1972, U.S.-U.S.S.R., 29 U.S.T. 4647.

[90] 16 U.S.C. §§ 703-711.

[91] The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, Oct. 12, 1940, 56 Stat. 1354, 161 U.N.T.S. 193.

[92] 16 U.S.C. §§ 1531, 1537a(e), ESA §§ 2, 8A(e).

[93] The Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 3, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243.

[94] 16 U.S.C. §§ 1531, 1537a(a)-(d), ESA §§ 2, 8A(a)-(d).

[95] The Convention on Wetlands of International Importance especially as Waterfowl Habitat, Feb. 2, 1971, T.I.A.S No. 11084, 996 U.N.T.S. 245.

[96] *See* Protocol between the Government of the United States of America and the Government of Canada Amending the 1916 Convention between the United Kingdom and the United States of America for the Protection of Migratory Birds in Canada and the United States, art. IV, S. Treaty Doc. No. 104-28, 1995 WL 877199 (Treaty).

B. The Property Clause—Regulating Federal Lands and Conduct that Affects Them. When bodies of water are located on federal lands, Congress's constitutional power to protect them is not in doubt. Article IV, Section 3 of the Constitution provides that "Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." It is well settled that under the Property Clause, the federal Government "exercises the powers both of a proprietor and of a legislature."[97] As proprietor, the federal Government has the right to protect its property, as do other landowners;[98] and as sovereign, it can regulate conduct affecting its property—preempting any state law to the contrary.[99]

Congress's Property Clause power also is not limited by the physical boundaries of federal lands. Rather, the power extends to conduct on non-federal lands that affects federal lands and their resources.[100] Justice Holmes famously explained the point this way: "Congress may prohibit the doing of acts upon privately owned lands that imperil publicly owned forests . . . . The danger depends on the nearness of the fire not upon the ownership of the land where it is built."[101]

Congress's authority under the Property Clause to protect federal water resources as proprietor and sovereign would seem to include, at a minimum, the right to prohibit conduct carried out on nearby non-federal lands that could harm waters on public lands. Although there may be some point at which the relationship between federal lands and conduct on non-federal lands becomes too attenuated to support federal regulation under the Property Clause, it is clear from case law that Congress's power in this regard is far-reaching. The Supreme Court has repeatedly referred to Congress's power over public lands as "without limitation."[102]

C. The Spending Power—Spending for the General Welfare. Another tool available to Congress for protecting the Nation's waters derives from the power of the purse. Article I, Section 8 of the Constitution empowers Congress to "lay and collect Taxes, Duties, Imposts, and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States." From this provision arises the spending power: Congress's authority to spend in pursuit of "the general welfare." Former Chief Justice Rehnquist wrote that:

> [i]ncident to this power, Congress may attach conditions on the receipt of federal funds, and has repeatedly employed the power "to further broad policy objectives by conditioning receipt of federal moneys upon compliance by the recipient with federal statutory and administrative directives."[103]

There is nothing new about conditioning federal grant monies; one commentator has indicated that conditions on grants can be traced back to the 1870s.[104]

Congress is not limited in its exercise of the spending power by the scope of its other enumerated powers.[105] "[O]bjectives not thought to be within Article I's 'enumerated legislative fields' may nevertheless be attained through the use of the spending power and the conditional grant of federal funds."[106] Thus, Congress can condition the receipt of federal funds on compliance with federal statutes and policies that Congress could not otherwise mandate.

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[97] *Kleppe v. New Mexico*, 426 U.S. 529, 540 (1976).

[98] *E.g., United States v. Cotton*, 52 U.S. 229, 231 (1851).

[99] *E.g., Hunt v. United States*, 278 U.S. 96, 100 (1928).

[100] *E.g., Camfield v. United States*, 167 U.S. 518, 525-26 (1897); *United States v. Alford*, 274 U.S. 264, 267 (1927); *Cappaert v. United States*, 426 U.S. 128, 138-41 (1976).

[101] *Alford*, 274 U.S. at 267.

[102] *E.g., United States v. Gratiot*, 39 U.S. 526, 534 (1840); *United States v. City & County of San Francisco*, 310 U.S. 16, 29 (1940).

[103] *South Dakota v. Dole*, 483 U.S. 203, 206-07 (1987) (citations omitted).

[104] Prof. Denis Binder, "The Spending Clause as a Positive Source of Environmental Protection: A Primer," 4 Chapman L. Rev. 147, 149 & n. 24 (2001).

However, the spending power has limits. First, the text of the constitutional provision itself limits spending to pursuit of "the general welfare," a point on which "the courts should defer substantially to the judgment of Congress."[107] Second, if Congress desires to condition the States' receipt of federal funds, it 'must do so unambiguously . . ., enabl[ing] the States to exercise their choice knowingly, cognizant of the consequences of their participation.'"[108] Third, conditions might be "illegitimate if they are unrelated 'to the federal interest in particular national projects or programs.'"[109] Fourth, Congress cannot induce states to engage in otherwise unconstitutional conduct.[110] Ultimately, Congress can rely on financial inducements to encourage the states, but not compel, or "commandeer," them to exercise their police power in a way that satisfies Congress's objectives.[111]

The "Swampbuster" provisions of the Food Security Act—which condition eligibility for federal farm subsidies on preserving wetlands—provide a salient example of how Congress can, and does, use its spending power to protect the Nation's waters.[112] It would also seem reasonable that Congress could expressly condition the grant of federal funds under various existing water programs on states' agreement to protect certain categories of waters, such as so-called "isolated wetlands."[113]

Conclusion

If, as currently proposed, Congress were to amend the Clean Water Act with the intent to regulate the waters of the United States to the fullest extent of its legislative power under the Constitution, the legislation would be based in no small part on the Commerce Clause and the treaty power, each as implemented on its own terms and through the Necessary and Proper Clause. Other potential sources of constitutional authority, not discussed in detail here, are the Property Clause and the spending power.

Relevant history and precedent demonstrate that Congress's authority to protect waters through the exercise of the Commerce Clause power alone is far-reaching, particularly in light of Congress's power to regulate even purely intrastate activities as part of a comprehensive legislative scheme. Should Congress assert federal jurisdiction over the Nation's waters based on *all* of its powers collectively, the case law suggests that it should be able to regulate, at the very least, the same categories of waters that were commonly understood to be subject to Clean Water Act jurisdiction during the three decades prior to the Supreme Court's 2001 ruling in *SWANCC*.

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[105] *United States v. Butler*, 297 U.S. 1, 66 (1936).
[106] *South Dakota*, 483 U.S. at 207 (citations omitted).
[107] *Id.* (citations omitted).
[108] *Id.* (citations omitted).
[109] *Id.* at 207-08 (citations omitted).
[110] *Id.* at 208 (citations omitted), 210.
[111] *Id.* at 211; *see also, e.g.*, *New York v, United States*, 505 U.S. 144, 175 (1992).
[112] *See, e.g.*, *United States v. Dierckman*, 201 F.3d 915, 922 (7th Cir. 2000) (upholding Swampbuster under the spending power).
[113] *See, e.g.*, Binder, *supra* note 105, at 161 (discussing the concept and relevant Clean Water Act grant programs and revolving funds).

Written Testimony of
Ron Curry
Secretary of the New Mexico Environment Department

Before the

United States House of Representatives
Transportation and Infrastructure Committee
Regarding the Clean Water Restoration Act (HR 2421)
July 17, 2007

Washington, DC

Introduction

My name is Ron Curry and I am the Cabinet Secretary of the New Mexico Environment Department in the administration of Governor Bill Richardson. Thank you for the opportunity to provide testimony regarding the importance of restoring Clean Water Act protections to many of America's rivers, lakes and streams.

The Clean Water Act has been our nation's main tool in ensuring the continued protection of the water we drink, enjoy for recreation and that wildlife communities rely upon. Unfortunately, the effectiveness of this tool has been blunted by two recent Supreme Court decisions. The court's rulings in *Solid Waste Agency of Northern Cook County v. US Army Corps of Engineers* (SWANCC) in 2001 and *Rapanos v. US* (Rapanos) in 2006 severely limited waters that receive protection under the Clean Water Act. This is especially troubling in New Mexico, an arid state that has relied on the Clean Water Act to help us protect our limited but precious water resources.

It is important for us to remember that the passing of the Clean Water Act is one of our nation's successes. Waters that thirty years ago were thick with waste discharges now support thriving recreational and economic activities. The U.S. Environmental Protection Agency's broad policy of ensuring protection for nearly all waters was a benefit to us all. Our quality of life improved and so too has the sustainability of aquatic species and wildlife. But now those protections are mired in widespread confusion and bureaucratic gridlock because it is no longer clear what waters will continue to be protected. My objective today is to urge your support for a solution that clears waters that have been muddied and encourage you to join Governor Bill Richardson in supporting the Clean Water Restoration Act (HR 2421).

The Problem

Prior to those Supreme Court decisions, the scope of the Clean Water Act was interpreted broadly to provide protection for of all of the nation's water bodies. Those bodies include small upland streams that flow intermittently in response to storm events and numerous wetlands that provide shelter for wildlife and create a natural filtration system for our aquifers. Those waters were valued, just as we place value on the large rivers that are conduits for commerce and industry. First in 2001, and again last year, the courts scaled back those broad protections, defining "navigable waters" narrowly. Those decisions have created great uncertainty regarding what waters are protected for federal, state and local officials as well as communities and landowners.

In effect, the Supreme Court ruled that there are two classes of water, one that is tied directly to "navigability" and deserves federal protection from pollution, and a second class that is completely abandoned or must undergo a case by case "significant nexus" test. That test requires that tributaries or wetlands would be dropped from protection if the government cannot directly prove they empty into navigable waters.

As the man charged by Governor Richardson with protecting New Mexico's limited water supply from pollution, I can tell you that basing the decision on what water deserves to be clean on whether you can float a boat on it is an extremely limited view. Quite simply, it's lunacy. There are times during summer months when you can't even float a boat down the mighty Rio Grande, New Mexico's main surface water resource.

To put it another way, many of you today have glasses of water before you. As an analogy, imagine that those glasses collectively made up the waters of the United States. Before the 2001 SWANCC decision, the water in those glasses was protected by the Clean Water Act. However, today, because of the SWANCC and Rapanos decisions, as much as half of those glasses may no longer be protected.

I want you to have good, clean water in those glasses but if those Supreme Court decisions stand, I just can't say for sure.

The Clean Water Restoration Act solves this problem by replacing the term "navigable waters of the United States" with "waters of the United States." That fix simply restores protections that were in place for three decades when the quality of America's rivers, lakes, wetlands and streams improved dramatically. The Act also restores Congress' original intent when it passed the Clean Water Act in 1972. That intent was to protect our nation's water resources for future generations.

Local Impact

Nowhere have the limitations created by these two recent Supreme Court decisions been felt more acutely than in the desert Southwest. We simply have no water to waste. The water we do have — and its quality — is of utmost importance to the continued health of our citizens and the future economic development of our region. By excluding isolated, intrastate, non-navigable waters from protections previously guaranteed under the Clean Water Act, those decisions could remove federal protections from more than 90 percent of our state's waterbodies because they flow only intermittently. Additionally, waters within closed basins that cover up to one fifth of New Mexico would also be left vulnerable to pollution. That includes 84 miles of perennial streams, 3,900 miles of intermittent waters, 4,000 playa wetlands, and numerous headwaters, springs, cienegas and isolated wetlands. Threatened basins include the Tularosa, Mimbres, San Augustine, Estancia and Salt in central, south central and southwestern New Mexico.

Those misguided court rulings also threaten New Mexico's precious, limited groundwater resources — the source of 90 percent of our clean drinking water. Surface water bodies are often directly linked to groundwater resources. Unregulated, damaging surface dumping will therefore ultimately lead to pollution in the aquifer. We cannot allow this to happen. The water beneath just one of those basins — the Salt Basin — has been estimated by the U.S. Geological Survey to contain as much as 57 million acre feet of water, including 15 million acre feet that is potable. That could prove to be a vital and needed future water supply for the rapidly growing City of Las Cruces in southern New

Mexico. However, if this aquifer is allowed to be polluted by surface dumping, its benefits for future New Mexicans will be severely curtailed.

Finally, the Southwest is currently in the grips of a years-long drought, putting our already limited water resources at an even higher premium. To weaken environmental oversight now is to invite disaster. That is why Governor Richardson has taken an aggressive leadership position on this issue.

State Actions

Governor Richardson has fought to restore protections to New Mexico's waters. In March 2003, he filed formal comments with the EPA petitioning that New Mexico's closed basins and other imperiled waters remain protected under the federal Clean Water Act. He also strongly supported the Clean Water Authority Restoration Act of 2003, a precursor to the legislation before you today.

More recently, Governor Richardson successfully opposed oil and gas drilling in the Valle Vidal or Northern New Mexico, and in order to protect its world class trout streams, he had this area's streams listed as Outstanding National Resource Waters. He is also fighting to protect the Salt Basin Aquifer, whose untapped water resources I mentioned before, from energy development at Otero Mesa. Finally, Governor Richardson recently launched a multi-million dollar effort — the first in state history — to provide a state funding source for river ecosystem restoration. But without lasting federal Clean Water Act protection, the state's efforts to restore and defend its waters could be severely eroded.

Clean Water Restoration Act

To remove protection afforded by the Clean Water Act from critical portions of our Nation's aquatic systems and to protect only selected reaches of our waters will result in real costs for our citizens — costs to the economy, the environment and to our quality of life.

The Clean Water Authority Restoration Act of 2007 provides a logical and practical solution by restoring the traditional scope of the Clean Water Act and clarifying the purpose of the Act based on long-standing regulatory definitions. This is not an expansion of federal authority but a return to a clear and comprehensive common goal enjoyed during the previous thirty years. This action will also allow continued state-federal partnerships to provide streamlined and efficient regulatory programs such as those that had been in operation prior to the recent Supreme Court cases.

The Citizens of New Mexico depend on the protection of a clean environment and sustainable water supply. If we are to ensure that New Mexico's and the Nation's waters are protected now and for future generations, we must act together to restore the purpose, scope, clarity and predictability of the Clean Water Act so that it will once again serve as the primary and comprehensive protection of our Nation's waters.

Thank you for inviting me here today to testify on this important issue. I look forward to your questions.

July 17, 2007

Hearing
on
Status of the Nation's Waters, including Wetlands,
under the Jurisdiction of the Federal Water Pollution Control Act

United States House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

Statement
by
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Mr. Chairman, members of the committee, I wish to thank you for this opportunity to express my views on federal jurisdiction under the Federal Water Pollution Control Act of 1972 (as amended by the Clean Water Act).

Federal Enforcement Prior to *Rapanos*

In over 30 years of enforcement of the Clean Water Act agency officials were never able to provide a predictable, consistent standard for federal jurisdiction. A report from the General Accounting Office (GAO) confirms this. The report documents that the Corps' local districts "differ in how they interpret and apply the federal regulations when determining what wetlands and other waters fall within the [Clean Water Act's] jurisdiction." U.S. General Accounting Office, *Waters and Wetlands: Corps of Engineers Needs to Evaluate Its District Office Practices in Determining Jurisdiction* 3 (Feb. 2004), *available at* www.gao.gov/new.items/d04297.pdf (last visited May 2, 2005) (*GAO Report*). But worse than the inter-district disagreements were the *intra*-district inconsistencies. The GAO report concluded that even Corps staff working in the same office could not agree on the scope of the CWA and that "three different district staff" would likely make "three different assessments" as to whether a particular water feature is subject to the Act. *GAO Report* at 22. This was more than a theoretical concern. This degree of uncertainty permeated the enforcement decisions of the Corps and EPA. As we saw in *Rapanos*, those decisions became the basis for imposing multimillion dollar penalties and seeking criminal prosecution.

The confusion over federal Clean Water Act jurisdiction was even touted in the popular press:

> "There is just pandemonium out there, but that is by design," said Julie Sibbing, senior program manager for wetlands policy for the National Wildlife Federation.
>
> "No one knows what is protected and what isn't."
>
> The chief of the regulatory program for the Corps of Engineers agreed that things aren't too clear.

Definition of "Ditch" is Muddy at Best, Cindy Skrzycki; Washingtonpost.com, Tuesday, Mar. 29, 2005; http://www. washingtonpost.com/wp-dyn/articles/A8362-2005Mar28.html (last visited Apr. 8, 2005).

The very definition of "wetlands" defied commonsense. Federal regulations defined "wetlands" as those areas "inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." 33 CFR § 328.3(b). Under this definition, an area need be wet only "for one to two weeks per year." Gordon M. Brown, *Regulatory Takings and Wetlands: Comments on Public Benefits and Landowner Cost*, 21 Ohio N.U. L. Rev. 527, 529 (1994). In other words, a "wetland" may be mostly dry land.

No reasonable person would conclude that mostly dry land is subject to federal control as a "navigable water." Ocie Mills and his son found this out the hard way. These two were convicted for filling "wetlands" on their property without a permit—an act a district court later characterized as the innocuous placing of clean fill on dry land:

> This case presents the disturbing implications of the expansive jurisdiction which has been assumed by the United States Army Corp of Engineers under the Clean Water Act. In a reversal of terms that is worthy of *Alice in Wonderland*, the regulatory hydra which emerged from the Clean Water Act mandates in this case that a landowner who places clean fill dirt on a plot of subdivided dry *land* may be imprisoned for the statutory felony offense of "discharging pollutants into the navigable waters of the United States."

United States v. Mills, 817 F. Supp. 1546, 1548 (N.D. Fla. 1993).

For this offense Mills and his son served 21 months in prison, one year in supervised release, paid $5,000 in fines, and were required to restore the site to its original condition. *Id.*

The definition of "discharge" also defied commonsense. In *Borden Ranch Partnership v. United States Army Corps of Engineers*, 261 F.3d 810 (9th Cir. 2001), the landowner was held liable for filling wetlands without a permit under § 404(a). But the alleged "discharge" was nothing more than moving soil in place by dragging a shank through the hard pan (a process called "deep ripping") to allow for the planting of vineyards in the place of row crops. *Id.* at 812-13. Although no dredged or fill material was actually added to the land, the Corps deemed it so because the soil was disturbed by the plowing process. *Id.* at 814. On writ of certiorari, challenging agency jurisdiction over this activity, the Supreme Court affirmed by an equally divided court after Justice Kennedy recused himself from the case. *See Borden Ranch Partnership v. United States Army Corps of Engineers*, 537 U.S. 99 (2002).

In addition to "wetlands" and "discharge," other terms defining a CWA violation were equally mystifying. In court, federal prosecutors were arguing "adjacent" meant hydrologically connected and "tributary" meant anywhere water flows, whereas "navigable waters" included the entire tributary system of the United States.

A rule of law as vague and ambiguous as the government's ever-changing § 404(a) jurisdiction, subjecting landowners nationwide to severe criminal penalties raised clear due process questions. The Supreme Court had long held that "before a man can be punished as a criminal under the Federal law his case must be 'plainly and unmistakably' within the provision of some statute." *United States v. Gradwell*, 243 U.S. 476, 485 (1917). *See also United States v. Lanier*, 520 U.S. 259, 267 (1997) ("[T]he touchstone is whether the statute, either standing alone or as construed, made it reasonably clear at the relevant time that the defendant's conduct was criminal."). But that was not the case under the Clean Water Act. The government's expansive interpretation of its own authority defied any plain reading of that Act, or even any consistent application. It became necessary, therefore, to seek clarification of the law from the Supreme Court. Mr. Rapanos stepped forward.

The *Rapanos* Decision

See attached analysis: ***Rapanos v. United States*, What Docs It Mean?**

The Lower Court Response

Adding to the confusion wrought by the fractured *Rapanos* decision, the lower Circuit Courts of Appeals have split over their interpretation of *Rapanos*. The Seventh and Ninth Circuits have held that Justice Kennedy's "significant nexus" test for federal jurisdiction is controlling. See *United States v. Gerke Excavating, Inc.*, 412 F.3d 804 (7th Cir. 2005) (petition for cert pending) (No. 06-1331) and *Northern California River Watch v. City of Healdsburg*, 457 F.3d 1023 (9th Cir. 2006) (petition for rehearing pending). In contrast, the First Circuit, in *United States v. Johnson*, 467 F.3d 56 (1st Cir. 2006) (petition for cert pending)(No. 07-9), held that federal jurisdiction under the Clean Water Act may be established based on either the Scalia plurality test or Justice Kennedy's test. But a district court in Texas opted for the Scalia approach.

United States v. Chevron Pipe Line Company,437 F. Supp. 2d 605 (N.D.Tex. 2006), the first case to apply the *Rapanos* decision, involved an accidental discharge of oil into a dry, unnamed drainage ditch that flowed only during significant storm events. *Id.* at 607. Although the oil was cleaned up before it reached any water, as required by state law, and the nearest navigable-in-fact waterway was connected to the ditch by intermittent streams scores of miles away, the Corps of Engineers sought fines from the company for discharging into "navigable waters" without a federal permit. *Id.* at 607-608. Therefore, the court looked to *Rapanos* for guidance in determining the scope of federal jurisdiction.

The court was quick to dismiss the Kennedy approach as an unworkable standard. The court observed that Justice Kennedy "advanced an ambiguous test—whether a 'significant nexus' exists to waters that are/were/might be navigable." *Id.* at 613. According to the court, "[t]his test leaves no guidance on how to implement its vague, subjective centerpiece. That is, exactly what is 'significant' and how is a 'nexus' determined?" *Id.* (citations omitted). Therefore, instead of relying on the Kennedy opinion, the court based its decision on existing Fifth Circuit precedent and "the Supreme Court's plurality opinion in *Rapanos v. United States*" and concluded there was no federal jurisdiction. *Id.* at 615. That case was never appealed and has only limited precedent.

In light of the Circuit split, however, the Supreme Court has been petitioned to clarify its *Rapanos* decision and determine the controlling opinion. In the meantime, the "significant nexus" standard imposed by the court in *Gerke*, and authorized alternatively in *Johnson*, is sure to result in continuing inconsistent and unpredictable application of the law. Only the Scalia test, with its clearer lines of demarcation, is likely to provide agency officials and the regulated public with consistent and predictable jurisdictional rules. As the dissent in *Johnson* observed, the "significant nexus" approach "leaves the door open to continued federal overreach" while the plurality's restriction on federal jurisdiction "strikes a constitutional balance" between federal power and individual rights. Johnson, 467 F.3d at 66-67. (Torruella, Circuit Judge, dissenting).

The Agency Response

On June 5, 2007, the EPA and the Corps Issued their belated "guidance" on how the agencies intend to implement the *Rapanos* decision. Unfortunately for the regulated public, it appears to be business as usual. Although the agencies declare that they will "generally" not assert jurisdiction over swales and erosional features or ditches lying wholly in upland areas, they hold out the possibility that they may do so. Besides these minor (and conditional) exceptions, the agencies intend to assert their authority to the fullest, using as broad an interpretation as possible for both the Scalia and Kennedy tests. What the agencies do not regulate categorically, they will regulate case-by-case under the "significant nexus" rubric.

The agencies state that they will continue to assert categorical jurisdiction over traditional navigable waters and adjacent wetlands. Likewise, they will regulate all "relatively permanent" tributaries to traditional navigable waters and those wetlands with "a continuous surface connection" to such tributaries. But this last category is contrary to both the Scalia plurality and the Kennedy concurrence. The Scalia plurality was clear, something more than a continuos surface connection is required–i.e., a boundary drawing problem:

> Therefore, *only* those wetlands with a continuous surface connection to bodies that are "waters of the United States" in their own right, so that there is no clear demarcation between "waters" and wetlands, are "adjacent to" such waters and covered by the Act. Wetlands with only an intermittent, physically remote hydrologic connection to "waters of the United States" do not implicate the boundary-drawing problem of *Riverside Bayview,* and thus lack the necessary connection to covered waters that we described as a "significant nexus" in SWANCC, (citation omitted). Thus, establishing that wetlands such as those at the Rapanos and Carabell sites are covered by the Act requires two findings: First, that the adjacent channel contains a "wate[r] of the United States," (*i.e.,* a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the "water" ends and the "wetland" begins.

Rapanos, 126 S.Ct. at 2226-2227.

And, according to Justice Kennedy, categorical regulation of wetlands adjacent to "major tributaries" would require additional regulation or adjudication. *Id.* at 2248. "Absent more specific regulations ... the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries." *Id.* at 2249. Nevertheless, the agencies ignore these requirements.

Under the new "guidelines," the agency will determine jurisdiction over all other tributaries and wetlands based on whether the feature has a "significant nexus" with or "significantly affects" downstream navigable waters in light of its physical, chemical or ecological characteristics. But this is strictly pro forma. The outcome is forgone. As the Corps argued in the *Johnson* case, the agency has already determined that all wetlands are significant. In addition, nothing in the "guidelines" suggest that the agencies won't continue to assert jurisdiction over isolated ponds and wetlands in contravention of *SWANCC.*

The Congressional Response

Recent legislation has been introduced in the house to amend the definition of "waters of the United States" in the Clean Water Act–the Clean Water Restoration Act, H.R. 2421 (2007). This legislation appears aimed at three objectives: (1) to bolster Congressional findings in support of the Clean Water Act, (2) to broadly redefine jurisdictional waters, and (3) to declare Congress' intent to exercise its full constitutional authority.

The bill includes findings that the Clean Water Act is necessary to protect interstate commerce (e.g., Finding (8)), to protect federal lands (Finding 16), and in furtherance of certain international treaties (Finding 15). These recitations are included to underscore Congress' reliance on its Commerce Clause authority, its treaty powers, and its power over federal lands.

Article IV, Section 3 of the Constitution states that "Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." Congressional power over federal land is accepted as plenary. Therefore, Congress can act to protect federal lands. But this is unlikely to provide a sufficient basis for the broad-reaching scope of the Clean Water Act as proposed in the bill which includes waters unlikely to have any affect on federal property.

As for the treaty power, the 1920 case of *Missouri v. Holland*, 252 U.S. 416, lends support to the proposition that Congress may pass legislation implementing treaties, such as for the protection of migratory birds, but with the caveat that the treaty does not contravene the Constitution. Presumably, this means that Congress may not rely on a treaty to go beyond its enumerated powers.

The enumerated power on which Congress has traditionally relied for passage of its environmental laws is the commerce power. Recent Commerce Clause jurisprudence indicates the Supreme Court will impose limits on this power. A Commerce Clause question is raised by the proposed Clean Water Restoration Act because it assumes there are no limits to congressional power to regulate the waters of the United States. The bill defines jurisdictional waters this way:

> The term "waters of the United States" means all waters subject to the ebb and flow of the tide, the territorial seas, and **all interstate and intrastate waters** and their tributaries, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, **and all impoundments of the foregoing**, to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution.

Paragraph 24 (emphasis added).

This definition of federal authority is not a "restoration" of congressional intent. It far exceeds the jurisdictional scope of the current Clean Water Act as it appears in the text of the statute. It even exceeds the extravagant scope of the existing federal regulations on which this definition is, in part, based. Indeed, with its claim of authority over "all interstate and intrastate waters," this bill pushes the limits of federal power to an extreme not matched by any other law, probably in the history of this country. Neither an ornamental pond nor the proverbial kitchen sink are excluded.

The Supreme Court has recognized three categories of legitimate Commerce Clause regulation. First, Congress has authority to regulate the "use of the channels of interstate commerce." *See United States v. Lopez*, 514 U.S. 549, 558 (1995). Second, Congress may "regulate and protect the instrumentalities of interstate commerce, or persons or things in interstate commerce." *Id.* And third, Congress is authorized to regulate activities "that substantially affect interstate commerce." *Id.* at 559.

By definition, traditional navigable waters can be used as channels of interstate commerce. But the waters encompassed in the Clean Water Restoration Act include all nonnavigable waters. Therefore, the regulation of such waters is not regulation of the use of channels of interstate commerce. It is, instead, the quintessential regulation of activities that must be sustained, if at all, as activities that "substantially affect" interstate commerce.

By its terms, Section 404(a) of the Clean Water Act covers only "the discharge of dredged or fill materials into" regulated waters and, like the prohibition on the possession of guns in *United States v. Lopez*, 514 U.S. 549 and the cause of action for domestic violence in *United States v. Morrison*, 529 U.S. 598 (2000), on its face, Section 404(a) has nothing to do with economic activity. Nor is that provision part of a larger *economic* scheme that would be undermined by limiting the regulatory reach of Section 404(a). Therefore, such discharges cannot be aggregated to satisfy the Court's test for "substantial effects."

> Section 922(q) is a criminal statute that by its terms has nothing to do with 'commerce' or any sort of economic enterprise, however broadly one might define those terms. Section 922(q) is not an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated. It cannot, therefore, be sustained under our cases upholding regulations of activities that arise out of or are connected with a commercial transaction, which viewed in the aggregate, substantially affects interstate commerce.

Lopez, 514 U.S. at 561.

The Supreme Court's recent decision in *Gonzales v. Raich*, 125 S. Ct. 2195 (2005), does not change this analysis. The Clean Water Act does not address a market scheme that clearly falls "within the reach of the federal power" like the Controlled Substances Act in *Raich*, or even the Agricultural Adjustment Act in *Wickard*. The former regulated the entire market in drugs while the later regulated the entire market in wheat. The CWA, in contrast, does not purport to regulate any market or commodity at all. Under a constitutional analysis, therefore, the Supreme Court is likely to curtail any limitless interpretation of Clean Water Act authority.

The Clean Water Restoration Act not only raises a constitutional question, the bill itself calls for court intervention. Rather than define the reasonable scope of its federal power to regulate inter- and intra-state waters in the first instance, as it should do, the bill authorizes Congress to defer to the courts to determine "the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution." In effect, the Act is an abdication of the legislative role.

Conclusion

To be sure, the enforcing agencies and the regulated public are in need of clear direction as to the scope of federal power to regulate wetlands and other waters. Thus far, all three branches have failed in this regard. The Supreme Court cannot come to an agreement and the agencies have been either unwilling or unable to promulgate consistent regulations that are both protective of environmental values and recognize the State and individual rights protected by the Constitution. As laudable as the current effort is to propose legislation to amend the Clean Water Act, the proposed Clean Water Restoration Act will just provide another round of intense litigation.

Thank you,

M. Reed Hopper

M. Reed Hopper

Rapanos v. United States, What Does It Mean?[1]

By

M. Reed Hopper[2]

INTRODUCTION

The Clean Water Act prohibits the discharge of pollutants, including dredged and fill material, into "navigable waters"[3] without a federal permit and defines the term "navigable waters" as "waters of the United States."[4] The Army Corps of Engineers and the Environmental Protection Agency interpreted "navigable waters" to cover virtually any area over which water flows, including the shallow "wetlands" on Mr. Rapanos' Michigan lots. When Mr. Rapanos filled his wetlands without authorization, he was charged with a violation of the Act. In one instance, the district court found Mr. Rapanos liable because the "wetlands" on his property were deemed adjacent to a tributary (i.e., a nonnavigable, manmade drainage ditch) that flowed through a series of conduits to a navigable-in-fact waterway up to twenty miles away.[5] The Sixth Circuit Court of Appeals upheld the district court determination and ruled that any hydrological connection with a traditional navigable water was sufficient for federal jurisdiction no matter how remote or insubstantial the connection.[6] On June 19, 2006, the U.S. Supreme Court reversed the Sixth Circuit decision and invalidated the agencies' interpretation.[7]

THE VOTE

In a rare, but not unheard of, situation, the Supreme Court split with three different rationales and a 4-1-4 vote. Nevertheless, a clear majority emerged in favor of Rapanos. Five of the nine justices voted to overturn the court below. While the court did not provide a clear delineation of federal jurisdiction under the Clean Water Act, the court did unequivocally reject the government's extravagant claim of authority over virtually all waters and much of the land in the Nation. As Chief Justice Roberts put it, rather than follow the court's lead in a previous case limiting federal authority under the Clean Water Act, "the Corps chose to adhere to its essentially boundless view of the scope of its power. The upshot today is another defeat for the agency."[8] In less charitable phraseology, Justice Scalia stated:

> In applying the definition to "ephemeral streams," "wet meadows," storm sewers and culverts, "directional sheet flow during storm events," drain tiles, man-made drainage ditches, and dry arroyos in the middle of the desert, the Corps has stretched the term "waters of the United States" beyond parody. The plain language of the statute simply does not authorize this "Land Is Waters" approach to federal jurisdiction.[9]

In the end, four Justices, forming a plurality on the court, determined the language, structure, and purpose of the Clean Water Act required limiting federal authority to "relatively permanent, standing or continuously flowing bodies of water" traditionally recognized as "streams, oceans, rivers and lakes" that are connected to traditional navigable waters.[10] These Justices (Scalia, Thomas, Alito, and Roberts) would also authorize federal regulation of wetlands abutting these water bodies if they contain a continuous surface water connection such that the wetland and water body are "indistinguishable."[11] Four justices in the dissent took the view that the agencies could choose to regulate essentially any waters (and much of the land) to advance the statutory goal of maintaining the "chemical, physical, and biological integrity of the Nation's waters."[12] Justice Kennedy, on the other hand, acted alone and proposed a "significant nexus" test for determining federal Clean Water Act jurisdiction.[13] Under this test, a water body would be subject to federal regulation only if that water body would significantly affect a navigable-in-fact waterway.[14] Justice Kennedy would exclude from regulation remote drains, ditches, and streams with insubstantial flows and reject speculative evidence of a "significant nexus." [15]

WARRING JUDICIAL PHILOSOPHIES

The court's disparate opinions derive from a difference in judicial philosophy. The dissent, authored by Justice Stevens, and joined by Justices Souter, Ginsberg, and Breyer, stands ready to uphold any regulatory interpretation of the statute that would further the agency's perception of the overall purpose of the Act whereas the Scalia plurality believes the scope of the Clean Water Act must be consistent with the statutory language. The problem with the dissent's "ends-justifies-the-means" approach, as the Scalia plurality points out, is that it "substitute[s] the purpose of the statute for its text."[16] Justice Scalia does not mince words in his condemnation of this interpretive philosophy:

> And as for advancing "the purposes of the Act": We have often criticized that last resort of extravagant interpretation, noting that no law pursues its purpose at all costs, and that the textual limitations upon a law's scope are no less a part of its "purpose" than its substantive authorizations.[17]

The "textual limitation" in the Clean Water Act to which Justice Scalia refers is Congress' use of the term "navigable waters." That term has to mean something. Even Justice Kennedy, who parts ways with Justice Scalia on the scope of the Act, castigates Justice Stevens for reading the term right out of the statute.[18]

Implicit in the plurality's unwillingness to issue the Corps and EPA a regulatory blank check is the recognition that freewheeling regulation is incompatible with the "rule-of-law." The "rule-of-law," like "separation of powers" with its inherent limits on federal authority, is a fundamental safeguard against arbitrary government and ensures that the means of accomplishing the desired ends (no matter how laudable) are fair, consistent, predictable, and orderly–protections currently lacking in enforcement of the Clean Water Act.

Beyond this, the "purpose" of the act is often in the eye of the beholder. While Justice Stevens sees clear congressional intent in the statutory declaration that the objective of the Clean Water Act "is to restore and maintain the chemical, physical, and biological integrity of the Nations' waters,"[19] Justice Scalia sees clear congressional intent in the statutory declaration that the objective is to be accomplished by specific means; namely, by eliminating "the discharge of pollutants into the navigable waters"[20] (as opposed to the Nation's waters) and pursuant to

> the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources...[21]

In light of these considerations, Justice Stevens' petulant accusation that the Scalia plurality is simply against environmentalism[22] falls flat. One wonders if Justice Stevens would advocate such broad agency deference if the Corps had stood by its original interpretation of the Clean Water Act in 1974 that the agency could only regulate traditional navigable waters.[23]

SO, WHAT'S COVERED AND WHAT'S NOT COVERED?

Putting aside the dissent, whose regulatory approach was defeated by a five justice majority, the *Rapanos* decision provides us with two different jurisdictional tests.

Jurisdictional Waters - Scalia Plurality

The Scalia plurality adopts a hydrographic test to define jurisdictional waters. Under this test "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic features' that are described in ordinary parlance as 'streams, oceans, rivers and lakes,'" that are connected to navigable-in-fact waters, are subject to regulation under the Clean Water Act.[24] Although these water bodies can be either navigable-in-fact or nonnavigable and intrastate, they do "not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall."[25]

The Scalia plurality would exclude a long list of other waters and lands from federal jurisdiction, including:[26]

- nonnavigable, isolated, intrastate waters
- channels and streams with intermittent or ephemeral flows (but not seasonal flows)
- dry arroyos, coulees and washes
- directional sheet flow
- wet meadows
- storm sewers and culverts
- drain tiles
- man-made drainage ditches
- "point sources" such as pipes, ditches, channels, and conduits
- sewage treatment plants
- waterworks appurtenances such as mains, pipes, hydrants, machinery, and buildings.
- 100 year flood plain

Jurisdictional Waters - Kennedy Concurrence

The Kennedy concurrence adopts an effects test to define jurisdictional waters. Under this test only a water that possesses "a significant nexus to waters that are navigable-in-fact or that could reasonably be so made" are subject to regulation under the Clean Water Act.[27]

Justice Kennedy would exclude:

- nonnavigable, isolated, intrastate waters (such as certain ponds and mudflats)[28]
- remote drains, ditches and streams with insubstantial flows[29]

Jurisdictional Wetlands - Scalia Plurality

Under the Scalia plurality, "only those wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right, so that there is no clear demarcation between 'waters' and wetlands, are 'adjacent to' such waters and are covered by the Act."[30] The wetland must be "as a practical matter *indistinguishable*"[31] from the relatively permanent body of water and that water body itself must be "connected to traditional interstate navigable waters."[32]

The Scalia plurality rejects the agencies' regulatory definition that "adjacent" means "bordering, contiguous, or neighboring." Instead, the plurality adopts the ordinary meaning of the term–"adjacent" means abutting.[33]

Jurisdictional Wetlands - Kennedy Concurrence

Under the Kennedy concurrence, "When the Corps seeks to regulate wetlands adjacent to navigable-in-fact waters, it may rely on adjacency to establish jurisdiction."[34] Categorical regulation of wetlands adjacent to "major tributaries" however, would require additional regulation or adjudication.[35]

"Absent more specific regulations ... the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries."[36] According to Justice Kennedy, this showing is necessary to avoid unreasonable applications of the statute such as the "regulation of drains, ditches, and streams remote from any navigable-in-fact water and carrying only minor water volumes towards it."[37] And, "a reviewing court must identify substantial evidence supporting the Corps' claims."[38] The agency cannot speculate; when "wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."[39]

Justice Kennedy defines **"significant nexus"** in the context of wetland regulation: "Wetlands possess the requisite nexus, and thus come within the statutory phrase "navigable waters," if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as "navigable."[40] This definition may include wetlands without an actual hydrological connection to navigable-in-fact waters (but presumably not wholly isolated).

HOW DOES *RAPANOS* AFFECT THE COURT'S PRIOR DECISIONS?

Riverside Bayview

To the Scalia plurality, the significance of *United States v. Riverside Bayview Homes, Inc.*[41], lies in its facts. In that case, the court had to determine if a wetland adjacent to a navigable-in-fact waterway was subject to regulation under the Clean Water Act. The circumstances were unique in that the marshy area was "characterized by saturated soil conditions and wetland vegetation [that] extended beyond the boundary of respondent's property to Black Creek, a navigable waterway."[42] The wetland and navigable waterway were so intertwined it was difficult to tell where the water ended and the land began.[43] Thus the court held: "Because respondents property is part of a wetland that actually abuts on a navigable waterway, respondent was required to have a permit in this case."[44]

In *Rapanos*, the Scalia plurality uses the facts in *Riverside Bayview* as the "gold standard" for determining jurisdiction over adjacent wetlands: "the lower courts should determine ... whether the wetlands in question are 'adjacent' to [covered waters] in the sense of possessing a continuous surface connection that creates the boundary-drawing problem we addressed in *Riverside Bayview*."[45]

Contrary to the plurality, the Stevens dissent relies on the broad language of the decision, particularly footnote 9, to justify complete deference to the agency interpretation of its Clean Water Act authority. But Justice Kennedy takes a position closer to the plurality. He points out that *Riverside Baview* "addressed no factual situation other than wetlands adjacent to navigable-in-fact waters" and concludes:

> The Corps' theory of jurisdiction in these consolidated cases–adjacency to tributaries, however remote and insubstantial–raises concerns that go beyond the holding in *Riverside Bayview*; and so the Corps' assertion of jurisdiction cannot rest on that case.[46]

With a majority of the court sharing this view, *Riverside Bayview* can no longer be cited as holding that the Corps and EPA can regulate any wetland neighboring any tributary. But the case will surely be cited for its factual description of adjacent wetlands.

SWANCC

Like *Riverside Bayview* 16 years earlier, *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers*[47] called on the Supreme Court to address a jurisdictional question under the Clean Water Act, but at the opposite end of the spectrum.

Instead of wetlands "inseparably bound up" with navigable waters, the Corps sought to regulate shallow ponds that had absolutely no hydrological connection with any navigable waters.[48] The asserted basis for jurisdiction was the Corps' "Migratory Bird Rule" that authorized federal regulation of any waters that could be used by migratory birds.[49] Because the regulation of these "nonnavigable, isolated, intrastate water bodies" would read the term "navigable waters" out of the statute, the court invalidated the rule and rejected the Corps' broad interpretation of its regulatory authority.[50]

Post *SWANCC*, most of the lower courts that have addressed the scope of the Clean Water Act have routinely limited the case to its facts holding that the only effect of *SWANCC* was to invalidate the "Migratory Bird Rule" while the Corps continued to assert jurisdiction over isolated water bodies.[51] But the *Rapanos* decision brings some clarity to the issue.

In *Rapanos*, all nine Justices are in agreement as to the holding in *SWANCC*. The Scalia plurality[52], the Kennedy concurrence[53], as well as the Stevens dissent[54], all represent that *SWANCC* excluded "nonnavigable, isolated, intrastate water bodies" (like certain ponds and mudflats) from federal jurisdiction. This is a significant victory for landowners in its own right because of the prevalence of these water bodies on private lands.

With this unanimous reading of the result in *SWANCC*, that case can no longer be said to have merely invalidated the "Migratory Bird Rule."

DOES *RAPANOS* AFFECT SECTION 402 OR JUST 404?

Section 404(a) of the Clean Water Act covers dredged and fill activity while section 402 applies to other discharges; typically industrial pollutants under the EPA's National Pollutant Discharge Elimination System (NPDES) program. *Rapanos* was a 404 case but both sections utilize the same definition of "navigable waters."[55]

Justice Scalia acknowledges that the plurality's narrower definition of "navigable waters" would apply to section 402 but concludes it would not "significantly affect[] the enforcement of [§ 402]" because the "lower courts applying [§ 402] have not characterized intermittent channels as 'waters of the United States.'"[56]

> Moreover, the proof of downstream flow of pollutants required under [§ 402] appears substantially similar, if not identical, to the proof of a hydrological connection that would be required, on the Sixth Circuit's theory of jurisdiction, to prove that an upstream channel or wetland is a "water of the United States."[57]

"In either case," Justice Scalia continues, "the agency must prove that the contaminant-laden waters ultimately reach covered waters."[58]

Presumably, under the Kennedy "significant nexus" test, the agency would have the burden of demonstrating the discharge has entered a water body that significantly affects a navigable-in-fact water.

WITH A SPLIT DECISION LIKE THIS, WHICH OPINION CONTROLS?

In the 1977 case of *Marks v. United States*[59] the Supreme Court stated that "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds."[60] While this rule has been difficult to apply in some cases, it is the only rule sanctioned by the Supreme Court for interpreting its split decisions.[61] "Narrowest grounds" has been interpreted to mean that opinion which is "a logical subset of other, broader opinions."[62] Put another way:

> The Justices supporting the broader legal rule must necessarily recognize the validity of the narrower legal rule. That is, if a statute is found to be constitutionally permissible pursuant to a strict scrutiny standard of review, then it is necessarily permissible pursuant to a rationale basis standard of review. From the text of the alternative concurring opinions, it is possible to determine that if all of the Justices apply the narrower rule, the outcome would have been the same.[63]

In the *Rapanos* case, the Scalia plurality appears more narrowly drawn in that it is a logical subset of the Kennedy test. The narrow plurality test is more like strict scrutiny whereas the broader Kennedy test is more like rational basis. Even the dissent thought so:

> I assume that Justice Kennedy's approach will be controlling in most cases because it treats more of the Nation's waters as within the Corps' jurisdiction, *but in the unlikely event that the plurality test is met but Justice Kennedy's is not,* courts should also uphold the Corps' jurisdiction. In sum, in these and future cases the United States may elect to prove jurisdiction under either test. [64]

Thus, under *Marks*, the Scalia plurality is controlling. This makes sense from a pragmatic standpoint as well because a water body that satisfies the plurality test would also satisfy the Kennedy test and even the dissent such that the jurisdictional determination would garner all nine votes on the Court for unanimous support.

If the plurality opinion is followed by the courts below, it would substantially curtail federal jurisdiction under the Clean Water Act.[65] If, on the other hand, Justice Kennedy's "significant nexus" test is adopted, the limitation on federal authority will vary on a case-by-case basis depending on whether the court gives the test a narrow or a broad reading.

WHAT HAPPENS WITH THE *RAPANOS* CASE NOW?

The Supreme Court vacated the Sixth Circuit opinion and remanded the case for further proceedings.

On remand, the Scalia plurality requires the courts to make two findings:

> First, that the adjacent channel contains a "wate[r] of the United States," (i.e., a relatively permanent body of water connected to traditional interstate navigable waters); and second, that the wetland has a continuous surface connection with that water, making it difficult to determine where the "water" ends and the "wetland" begins.[66]

Based on the current state of the record, the Rapanos properties are unlikely to meet this jurisdictional test because on two of the three sites there are intervening manmade drainage ditches and in all cases the evidence does not establish that these wetlands are as a practical matter indistinguishable from a stream, river or lake, the nearest of which is miles away.[67]

In contrast to the Scalia plurality, the Kennedy concurrence calls for the courts to determine if the regulated wetlands, "either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of" navigable-in-fact waters.[68]

Whether the Rapanos properties meet this test will depend on how broadly or narrowly the lower courts read the test. Although Justice Kennedy cited expert testimony in the record that the regulated wetlands may have a significant effect on downstream navigable-in-fact waters, the Justice noted that the government expert never did a site-specific analysis and that the record is currently inadequate to determine a jurisdictional connection.[69]

CONCLUSION

We can conclude the following from the *Rapanos* decision:

1. That federal agencies have no authority under the Clean Water Act to regulate truly isolated, nonnavigable, intrastate water bodies.

2. That federal agencies have no authority under the Clean Water Act to regulate any area merely because it has a hydrological connection with downstream navigable-in-fact waters.

3. That federal agencies have no authority under the Clean Water Act to regulate remote drains and ditches with insubstantial flows.

4. That the *Rapanos* decision applies to both the § 402 NPDES permit program of the Clean Water Act and the § 404 dredge and fill permit program.

5. That if the federal agencies or courts adopt the view of the Scalia plurality, federal jurisdiction under the Clean Water Act will end at "those relatively permanent, standing or continuously flowing bodies of water ... that are described in ordinary parlance as 'streams,

oceans, rivers and lakes,'" as well as wetlands indistinguishable from these covered waters.

6. That if the federal agencies or courts adopt the view of the Kennedy concurrence, federal jurisdiction will extend to those waters and wetlands that possesses "a significant nexus to waters that are navigable-in-fact or that could reasonably be so made."

The *Rapanos* case significantly alters the scope of federal authority under the Clean Water Act. How significant will depend on the willingness of federal regulators and the lower courts to adhere to the Supreme Court's clear determination that the scope of federal power under the Clean Water Act has meaningful limits.

Endnotes

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1. With some changes this article first appeared in Mealey's Litigation Report: Real Estate (July 2006).

2. Mr. Hopper is a principal attorney with the Pacific Legal Foundation who represented Mr. Rapanos in the U.S. Supreme Court.

3. 33 U.S.C. § 1344(a).

4. 33 U.S.C. § 1362(7).

5. See United *States v. Rapanos*, 190 F.Supp.2d 1011, 1012 (E.D. Mich. 2002). (This case involved three separate sites in the State of Michigan; the Salzburg, Hines Road, and Pine River sites. The first two included wetlands adjacent to nonnavigable manmade drainage ditches while the third was deemed "near" the Pine River, a nonnavigable waterway. All three sites were miles removed from any navigable-in-fact water body.)

6. See United States v. Rapanos, 376 F.3d 629, 639 (6th Cir. 2004).

7. *Rapanos v. United States*, 126 S.Ct. 2208 (2006) (*Rapanos* was consolidated with *Carabell v. United States*. That case involved wetlands separated from a nonnavigable manmade ditch by a berm such that there was no direct hydrological connection between the wetlands and the ditch. The ditch flowed eventually to Lake St Clair, a navigable-in-fact water body. Under federal regulations, wetlands adjacent to a tributary to a navigable-in-fact waterway are subject to federal jurisdiction even in the absence of a hydrological connection. See 33 CFR § 328.3(a)(5) and (7).)

8. *Id.* at 2236.

9. *Id.* at 2222.

10. *Id.* at 2221 and 2227 (Scalia, J.).

11. *Id.* at 2234.

12. *Id.* at 2252 *et seq.* (Stevens, J., dissenting).

13. *Id.* at 2236. (Kennedy, J., concurring in result).

14. *Id.* at 2248.

15. *Id.* at 2248-2249.

16. *Id.* at 2234.

17. *Id.* at 2232.

18. *Id.* at 2247.

19. 33 U.S.C. § 1251(a).

20. 33 U.S.C. § 1251(a)(1).

21. 33 U.S.C. § 1251(b).

22. *Rapanos*, 126 S.Ct. (Dissent at fn 8).

23. *See Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers*, 531 U.S. 159, 168 (2001).

24. *Rapanos*, 126 S.Ct. at 2225 -2227.

25. *Id.*

26. *Id.* at 2217-2223.

27. *Id.* at 2236.

28. *Id.* at 2240-2245.

29. *Id.* at 2248-2249.

30. *Id.* at 2226.

31. *Id.* at 2234.

32. *Id.* at 2227.

33. *Id.* at 2225-2226.

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34. *Id.* at 2249.

35. *Id.* at 2248.

36. *Id.* at 2249.

37. *Id.*

38. *Id.* at 2251.

39. *Id.* at 2248.

40. *Id.* at 2248.

41. 474 U.S. 121 (1985).

42. *Id.* at 131.

43. *Id.* at 132.

44. *Id.* at 135.

45. *Rapanos*, 126 S.Ct. 2235.

46. *Id.* at 2248.

47. 531 U.S. 159 (2001).

48. *Id.* at 171.

49. *Id.* at 164.

50. *Id.* at 171-172.

51. *See*, for example, U.S. V. Rapanos, 376 F.3d 629, 637-638 (6th Cir. 2004).

52. *Rapanos*, 126 S.Ct. at 22217.

53. *Id.* at 2244.

54. *Id.* at 2256.

55. 33 U.S.C. § 1362(7).

56. *Rapanos*, 126 S.Ct. at 2227

57. *Id.* at 2228.

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58. *Id.*

59. 430 U.S. 188 (1977).

60. *Id.* at 193.

61. *See In re Michael Francis Cook*, 322 B.R. 336, 341 (2005) ("The only approach approved by the Supreme Court is the 'narrowest grounds' approach.").

62. *King v. Palmer*, 950 F.2d 771, 781 (D.C. Cir. 1991)

63. Ken Kimura, *A Legitimacy Model For The Interpretation Of Plurality Decisions*, 77 Cornell L. Rev. 1593, 1603-1604 (1992)

64. *Rapanos*, 126 S. Ct. at 2265 n.14. (Justice Stevens dissenting) (emphasis added)

65. This certainly proved true in the first case to apply the *Rapanos* decision. In *United States v. Chevron Pipe Line Company*, 437 F.Supp.2d 605 (N.D. Texas 2006), the district court determined Clean Water Act jurisdiction does not extend to a remote dry manmade drainage ditch. Rather than apply the Kennedy "significant nexus" test, which the court found ambiguous and without meaningful standards, the court elected to follow the Scalia plurality. But, for a contrary view see *Northern California River Watch v. City of Healdsburg*, 457 F.3d 1023 (9th Cir. 2006)(petition for rehearing pending)(Kennedy test is controlling); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723 (7th Cir. 2006)(Kennedy test is controlling); and, *United States v. Johnson*, 467 F.3d 56 (1st Cir 2006)(petition for rehearing pending)(jurisdiction may be established under either the plurality test or the Kennedy test).

66. *Id.* at 2227.

67. *Id.* at 2238 (Of course, the wetlands in *Carabell* would not meet the Scalia test because there is no surface water connection with any other body of water, permanent or otherwise.)

68. *Id.* at 2248.

69. *Id.* at 2250-2251.

TESTIMONY OF

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BEFORE THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES

ON

STATUS OF THE NATION'S WATERS. INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

PRESENTED ON

JULY 17, 2007

TESTIMONY OF ROBERT V. PERCIVAL

Robert F. Stanton Professor of Law &
Director, Environmental Law Program
University of Maryland School of Law

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

July 17, 2007

Chairman Oberstar, Congressman Mica, and Members of the Committee, thank you for inviting me to testify about the scope of federal jurisdiction under the Clean Water Act in the wake of the Supreme Court's *Rapanos* decision. I am Robert V. Percival, the Robert F. Stanton Professor of Law and Director of the Environmental Law Program at the University of Maryland School of Law. I teach environmental law, constitutional law and administrative law and I am the lead author of *Environmental Regulation: Law, Science and Policy*[1], a leading environmental law casebook first published in 1992 and now in its fifth edition. Much of my scholarship has focused on the historical development of environmental law including extensive research on the environmental decisions of the U.S. Supreme Court.[2] Prior to joining the Maryland faculty I served as a law clerk to U.S. Supreme Court Justice Byron R. White.

The topic of this hearing is extremely important. The United States has been a world leader in the development of environmental law. During the 1970s and 1980s Congress, with overwhelming bipartisan support, enacted landmark legislation to protect the environment. Due to the foresight of those Congresses, our water and air are much cleaner and our citizens are safer and healthier than in countries that only belatedly developed environmental law. Yet now, 35 year after enactment of the Federal Water Pollution Control Act, we find some of the most fundamental premises of our environmental laws under assault in the courts. Interest groups seeking to reap windfalls are urging the judiciary to create new loopholes in the vital legal infrastructure that protects our environment. In the face of this onslaught it is essential that Congress carefully monitor the state of environmental law and, when necessary, repair our legal safety net with new legislation.

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[1] Robert V. Percival, Christopher H. Schroeder, Alan S. Miller & James P. Leape, Environmental Regulation: Law, Science & Policy (5th ed. Aspen Publishing 2006).

[2] See, e.g., Robert V. Percival, Environmental Law in the Supreme Court: Highlights from the Marshall Papers, 23 Env. L. Rep. 10606 (1993); Robert V. Percival, "Greening" the Constitution – Harmonizing Environmental and Constitutional Values, 22 Envt'l L. 809 (2002); Robert V. Percival, Environmental Law in the Supreme Court: Highlights from the Blackmun Papers, 35 Env. L. Rep. 10637 (2005).

My testimony begins with a historical review of the scope of federal authority under the Federal Water Pollution Control Act, now known as "The Clean Water Act." It reviews the enactment of this legislation and the Supreme Court's unanimous decision upholding its protections for wetlands in United States v. Riverside Bayview Homes, Inc. ("Riverside Bayview").[3] It then considers more recent decisions by the Supreme Court that have narrowed the scope of the Act's safeguards. While the *Riverside Bayview* Court unanimously deferred to the expert judgment of the agencies administering the legislation, this approach stands in sharp contrast with that employed by five members of the Court today. The testimony reviews the Court's sharply divided decision in 2001 in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers ("SWANCC"), when it rejected application of the Clean Water Act to isolated wetlands.[4]

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[3] 474 U.S. 121 (1985).
[4] 531 U.S. 159 (2001).

It then considers the Court's decision last year in Rapanos v. United States ("Rapanos")[5] where the Justices split 4-1-4 in addressing the scope of federal authority under the Act.

The *Rapanos* decision has left the most fundamental question one asks about any regulatory statute – to what does it apply – in a state of chaos. The confusion generated by *Rapanos* threatens to undermine not only the particular program challenged in the case – the §404 program to protect wetlands -- but also other programs that rely on the same jurisdictional term ("waters of the United States") interpreted by the Court. These include the Clean Water Act's §402 permit program for point source dischargers of water pollutants and the Act's oil spill prevention program. *Rapanos* has produced the bizarre result that the law currently defining the scope of federal jurisdiction reflects the view of a single Justice that was rejected by each of the eight other Justices. Moreover, no one seems to know how to apply the new "significant nexus" test created by that Justice. This has spawned new legal challenges and enormous uncertainty concerning the scope of federal authority. Guidance issued last month by EPA and the U.S. Army Corps of Engineers is unlikely to resolve these problems, which can best be solved through Congressional action to clarify the scope of federal authority under the Act.

I. THE FEDERAL WATER POLLUTION CONTROL ACT OF 1972

During the 1970s Congress by overwhelming, bipartisan majorities enacted a series of laws to ensure comprehensive protection of the environment. These laws established the first national regulatory programs to prevent air and water pollution, control toxic substances, ensure safe management of hazardous waste, and access to safe drinking water. They reflected the considered judgment of Congress that the existing patchwork of state and local legislation and common law remedies was woefully inadequate to prevent severe environmental degradation.

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[5] 126 S.Ct. 2208 (2006).

In the decades before enactment of these national regulatory programs, growing interstate pollution problems spawned disputes between states that were heard by the U.S. Supreme Court exercising its original jurisdiction.[6] In a series of decisions spawning seven decades, the Supreme Court responded to interstate pollution disputes by developing a federal common law of nuisance.[7] The Court actually issued injunctions setting limits on emissions of air pollutants from a copper smelter,[8] requiring New York City to halt ocean dumping of its garbage and to build a municipal incinerator,[9] and requiring the City of Chicago to build its first sewage treatment plant to reduce its diversion of water from Lake Michigan to flush away its untreated sewage.[10]

Until the 1970s, Congress had not established any comprehensive, national regulatory programs to protect the environment. To be sure, the Rivers and Harbors Act of 1899 ("RHA"), known as the Refuse Act, prohibited the discharge of refuse into any "navigable water" without a permit, but the purpose of this legislation was to protect against obstructions to navigation, rather than to protect water quality. After the end of World War II, Congress adopted legislation to assist states and local governments in responding to growing environmental problems, but these laws did not impose national regulations to control pollution.

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[6] Article III, section 2 of the Constitution extends the judicial power to controversies between two or more states and to controversies between a state and citizens of another state. It specifies that the Supreme Court has original jurisdiction over cases in which a state shall be a party.

[7] The history of the federal common law of nuisance is discussed in detail in Robert V. Percival, The Clean Water Act and the Demise of the Federal Common Law of Interstate Nuisance, 55 Ala. L. Rev. 717 (2004).See, e.g., Missouri v. Illinois, 200 U.S. 496, 518 (1906); Georgia v. Tennessee Copper Co., 206 U.S. 230 (1907); New York v. New Jersey, 256 U.S. 296 (1921); New Jersey v. City of New York, 284 U.S. 585 (1931); Illinois v. Milwaukee, 406 U.S. 91 (1972).

[8] Georgia v. Tennessee Copper Co., 237 U.S. 474 (1915).

[9] New Jersey v. City of New York, 284 U.S. 585 (1931).

[10] Wisconsin v. Illinois, 281 U.S. 696 (1930).

The Federal Water Pollution Control Act (FWPCA), enacted by Congress in October 1972, was the second major federal law to create a national regulatory program to protect the environment after adoption of the Clean Air Act Amendments of 1970. Congress boldly declared that the purpose of the FWPCA was "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[11] Frustrated with the slow progress of state and local efforts to control water pollution, Congress opted to create a comprehensive, national regulatory program. The key innovation in the legislation, which was amended and renamed the Clean Water Act in 1977, was its requirement that permits be obtained for all discharges from point sources into the waters of the United States. The Act creates two national permit programs – §404 governing discharges of dredged and fill material, which is administered by the U.S. Army Corps of Engineers ("Corps") subject to EPA oversight, and §402's National Pollutant Discharge Elimination System (NPDES) governing point source discharges of pollutants.

Both permit programs govern discharges from point sources to "navigable waters," defined broadly to mean "the waters of the United States, including the territorial seas."[12] While the "navigable waters" concept was partly an outgrowth of the RHA, Congress clearly intended to extend the reach of the Clean Water Act substantially beyond traditionally navigable waters because its purpose was to protect the environment in comprehensive fashion rather than to protect navigation. More than 98 percent of the nation's waters are not navigable in fact and the quality of navigable waters is significantly affected by pollution entering their non-navigable tributaries and adjacent wetlands.

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[11] 33 U.S.C. §1251(a).

[12] CWA §502(7), 33 U.S.C. §1362(7).

To achieve substantial reductions in the discharge of water pollutants, the Clean Water Act imposed industry-wide, technology-based effluent limits on industrial dischargers. In its 1973 report to Congress the Council on Environmental Quality explained: "Perhaps the predominate influence on the law was the universal recognition that basing compliance and enforcement efforts on a case-by-case judgment of a particular facility's impacts on ambient water quality is both scientifically and administratively difficult."[13]

Congress's power to protect the quality of nation's waters through a comprehensive regulatory program is amply supported in the Constitution. Article I, §8 of the Constitution gives Congress express power to provide for the "general Welfare of the United States," to regulate commerce "among the several States," and "[t]o make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers."[14] Even as he was championing a new and more restrictive vision of Congressional power under the commerce clause, Supreme Court Justice William H. Rehnquist recognized the breadth of Congress's constitutional power to protect the nation's waters. Writing for the Court in 1979, he emphasized that federal constitutional authority was not limited in any way to the concept of navigability. "Reference to the navigability of a waterway adds little if anything to the breadth of Congress' regulatory power over interstate commerce. It has long been settled that Congress has extensive authority over this Nation's waters under the Commerce Clause."[15] Justice Rehnquist explained that: "The pervasive nature of Congress' regulatory authority over national waters was more fully described in United States v. Appalachian Power Co., 311 U.S. 377, 426 (1940): 'It cannot properly be said that the constitutional power of the United States over its waters is limited to control for navigation.'" Thus, he concluded that "congressional authority over the waters of this Nation does not depend on a stream's "navigability."[16]

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[13] Council on Environmental Quality, Environmental Quality – 1973, at 171 (1973).
[14] U.S. Const. art. I, §8, cl. 1, 3, 18.

Two years later in a landmark decision also authored by Justice Rehnquist, the Court held that the regulatory program established by the Clean Water Act was so comprehensive that it preempted the federal common law of interstate nuisance.[17] In his opinion for the Court, Justice Rehnquist declared that even though Congress had aopted a savings clause in 505(e) of the Act specifying that it did not restrict any statutory or common law right to relief, Congress "has occupied the field through the establishment of a comprehensive regulatory program supervised by an expert administrative agency."[18] He explained that:

> "Congress' intent in enacting [the Clean Water Act] was clearly to establish an all-encompassing program of water pollution regulation. *Every* point source discharge is prohibited unless covered by a permit, which directly subjects the discharger to the administrative apparatus established by Congress to achieve its goals.".'"[19]

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[15] Kaiser Aetna v. United States, 444 U.S. 164, 173 (1979).

[16] Citing Wickard v. Filburn, 317 U.S. 111 (1942), Justice Rehnquist also observed that:

> "a wide spectrum of economic activities 'affect' interstate commerce and thus are susceptible of congressional regulation under the Commerce Clause irrespective of whether navigation, or, indeed, water, is involved. The cases that discuss Congress' paramount authority to regulate waters used in interstate commerce are consequently best understood when viewed in terms of more traditional Commerce Clause analysis than by reference to whether the stream in fact is capable of supporting navigation or may be characterized as 'navigable water of the United States.'" 444 U.S. at 174.

[17] City of Milwaukee v. Illinois, 451 U.S. 304 (1981).

[18] 451 U.S. at 317.

[19] 451 U.S. at 318 (emphasis in original).

Justice Rehnquist noted that the problems of controlling water pollution are "difficult" and "technical" – "doubtless the reason Congress vested authority to administer the Act in administrative agencies possessing the necessary expertise," and he opined that courts were "particularly unsuited" to resolving them through "sporadic" and "ad hoc" application of federal common law.[20] Thus, even the Justice most clearly associated with championing state sovereignty and constitutional limits on federal authority acknowledged the comprehensive scope of the Clean Water Act and the wisdom of deferring to the expert judgments of the agencies charged with implementing it.

II. THE SUPREME COURT'S *RIVERSIDE BAYVIEW* DECISION

The importance of preserving wetlands was not well appreciated a century ago. In 1900 the U.S. Supreme Court said of the draining and filling of swamps that "the police power is never more legitimately exercised than in removing such nuisances."[21] Since the birth of our nation more than half of the wetlands in the lower 48 states have been destroyed, reducing an estimated 220 million acres of wetlands to approximately 100 million acres today. Yet we now realize that wetlands perform vital services such as pollution and flood control and that they serve as crucial feeding and breeding grounds for fish and waterfowl.

In United States v. Riverside Bayview Homes, Inc.[22] the U.S. Supreme Court addressed the scope of the Clean Water Act by deciding whether the statutory definition "waters of the United States" extended to wetlands adjacent to navigable waters. Writing for a unanimous Supreme Court, Justice Byron R. White noted that in 1975 the Corps had issued regulations defining the "'waters of the United States' to include not only actually navigable waters but also tributaries of such waters, interstate waters and their tributaries, and non-navigable intrastate waters whose use or misuse could affect interstate commerce. 40 Fed. Reg. 31,320 (1975)."[23] Assessing the validity of this regulatory definition, Justice White noted that it was appropriate for the Corps to consider the legislative history and underlying purposes of the Clean Water Act, which together "support the reasonableness of the Corps' approach of defining adjacent wetlands as 'waters' within the meaning of §404(a)."[24] Reviewing the Act's legislative history, Justice White observed: "Protection of aquatic ecosystems, Congress recognized, demanded broad federal authority to control pollution, for '[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.' S. Rep. No. 92-414, p. 77 (1972)."[25] Thus, he concluded that the use of the term "'waters of the United States' makes it clear that the term 'navigable' as used in the Act is of limited import" and that Congress intended "to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed 'navigable' under the classic understanding of that term."[26]

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[20] 451 U.S. at 325.

[21] Leovy v. United States, 177 U.S. 621, 636 (1900).

[22] 474 U.S. 121 (1985).

While acknowledging the difficulty of defining jurisdictional boundaries with precision, the Court in *Riverside Bayview* ultimately a functional approach that deferred to "the Corps' and EPA's technical expertise" in interpreting the jurisdictional reach of §404 expansively to promote the goals of the Act:

> "In view of the breadth of federal regulatory authority contemplated by the Act itself and the inherent difficulties of defining precise bounds to regulable waters,

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[23] 474 U.S. at 123-124.
[24] 474 U.S. at 132.
[25] 474 U.S. at 132-33.
[26] 474 U.S. at 133.

> the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act."[27]

Significantly, the Court went on to hold that federal jurisdiction over adjacent wetlands was not dependent on the flow of water between such wetlands and adjacent bodies of open water. Again, the Court based this judgment on deference to the Corps' conclusion "that wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water."[28] The Court's reasoning was not premised on any dictionary definition of "waters," but rather on the sensible notion that Congress intended to regulate wetlands whose degradation agency experts believe may interfere with its goal of providing comprehensive protection to water quality.

Riverside Bayview was not a controversial decision. The papers of the late Justice Thurgood Marshall reveal that Justice White's draft opinion was joined by all members of the Court within nine days after it initially had been circulated. Two weeks later, after purely stylistic changes were made in Justice White's initial draft, the unanimous decision was released on December 4, 1985.[29] The approach employed by the unanimous Court in *Riverside Bayview* was to interpret the scope of the Clean Water Act by examining its legislative history and purpose and granting proper deference to the ecological judgments of the agencies charged with implementing it. This approach represents the appropriate model for judicial review in areas as technical as environmental regulation.

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[27] 474 U.S. at 134.

[28] 474 U.S. at 135.

[29] Percival, Environmental Law in the Supreme Court: Highlights from the Marshall Papers, 23 Env. L. Rep. 10606, 13 (1993).

III. *SOLID WASTE AGENCY OF NORTHERN COOK COUNTY (SWANCC)*

A decade after *Riverside Bayview* was decided, the Supreme Court decided United States v. Lopez,[30] which spawned new challenges to the jurisdictional reach of the Clean Water Act. In *Lopez*, the Court held by a 5-4 majority that the Commerce Clause did not give Congress the authority to prohibit the possession of firearms in the vicinity of schools because the statute at issue regulated an activity that did not "substantially affect" interstate commerce. In Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers ("SWANCC") the Court was asked to consider whether Congress had the constitutional authority to apply §404 of the Clean Water Act to "nonnavigable, isolated, intrastate waters."

Relying on *Lopez*, the petitioner in *SWANCC* argued that Congress did not have the constitutional authority to require it to obtain a federal permit under §404(a) of the Clean Water Act before it filled an abandoned sand and gravel pit to create a landfill. After the sand and gravel pit closed in 1960 its excavation trenches became permanent and seasonal ponds, and the entire area was overgrown. When the county solid waste agency proposed to convert the site into a landfill, the Corps initially declined to assert §404 jurisdiction because it believed that the site contained no jurisdictional wetlands. Later, it reversed its position upon learning that the site was visited by over 100 species of migratory birds. In a preamble to its 1986 regulations, dubbed the "Migratory Bird Rule," the Corps had suggested that "waters of the United States" include waters that could be used as habitat by migratory birds or endangered species or to irrigate crops sold in interstate commerce.[31] The Seventh Circuit upheld application of §404(a) to the isolated wetland, finding that because it served as habitat for migratory birds, substantial effects on interstate commerce could be inferred from the millions of hunters and bird watchers who travel interstate in pursuit of birds.

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[30] 514 U.S. 549 (1995).

A sharply divided Supreme Court then reversed the Seventh Circuit's decision by the same 5-4 lineup of Justices who prevailed in *Lopez*.[32] However, the Court majority declined to reach the constitutional issue because it found that Congress had not intended to allow the Corps to regulated isolated wetlands. Stating that it expected a clear statement of Congressional intent to support "an administrative interpretation of a statute [that] invokes the outer limits of Congress' power," the Court majority concluded that the "Migratory Bird Rule" exceeded the Corps' authority under §404(a).[33] In a sharp dissent, Justice Stevens, joined by Justices Souter, Ginsburg and Breyer, argued that the Court had misapprehended the meaning of the 1972 Act and Congress's 1977 acquiescence in the Corps more expansive regulations.

The *SWANCC* majority sought to confine *Riverside Bayview* to its facts, while refusing to employ the functional approach Justice White had used in deferring to the Corps' ecological judgment concerning the impact of the wetlands on other jurisdictional waters. In its brief in *SWANCC* the Corps had argued that the term "isolated wetlands" is misleading. The Corps noted that while the term is used to refer to waters that are remote from and lack a surface connection to navigable waters, isolated waters may have other hydrologic connections to, and affect the quality of, traditional navigable waters, e.g., through groundwater connections and by playing important roles in flood and erosion control. Thus, the Corps maintained that its regulation "reflects an effort to identify categories of waters the degradation of which can be expected to have significant interstate effects, making protection of the relevant waters an appropriate subject of federal concern."

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[31] For a comprehensive discussion of the pre-*Rapanos* history of the Corps' regulations interpreting the scope of federal jurisdiction under the Clean Water Act see Lance D. Wood, Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands, 34 Env. L. Rep. 10187 (2004).

[32] Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, 531 U.S. 159 (2001).

[33] 531 U.S. at 172, 174.

The *SWANCC* majority's expressed constitutional concerns were rooted in the notion that regulation of isolated wetlands could significantly impinge on "the States' traditional and primary power over land and water use."[34] Yet the attorneys general of seven states (Iowa, Maine, New Jersey, Oklahoma, Oregon, Vermont, and Washington) had filed an amicus brief supporting the Corps' position in the case. They rejected the notion that the Migratory Bird Rule threatened state authority and argued that application of §404 to isolated wetlands protected states from the interstate impacts of wetlands degradation.

In January 2003 EPA and the Army Corps of Engineers solicited comment on how they should redefine "waters of the United States" in response to SWANCC.[35] The two agencies issued a joint memorandum to provide guidance concerning the impact of SWANCC on federal jurisdiction under the Clean Water Act (CWA).[36] The memorandum stated that SWANCC "squarely eliminates CWA jurisdiction over isolated waters that are intrastate and non-navigable, where the sole basis for asserting federal jurisdiction is the actual or potential use of the waters as habitat for migratory birds that cross state lines in their migrations."

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[34] 531 U.S. at 174.
[35] 68 Fed. Reg. 1991 (2003).
[36] 68 Fed. Reg. 1995 (2003).

Fearful that EPA and the Corps would adopt regulations providing a more restrictive definition of "waters of the United States," nearly all of the 43 States who responded to the agencies' request for comments opposed any significant narrowing of the Corps' jurisdiction, as did roughly 99% of the 133,000 other comments submitted. In December 2003 the agencies announced that they would not issue new regulations. Their announcement closely followed a White House meeting between President Bush and several hunting, fishing and conservation groups who urged the President not to weaken wetlands protections. Jim Range, chairman of the Theodore Roosevelt Conservation Partnership who attended this meeting, applauded the decision, saying: "It is hard to overestimate how vital wetlands are to the overall health of American wildlife. By clearly stating today that there will continue to be no net loss of wetlands, the President has given Americans who care about fish and wildlife a big reason to smile."[37]

SWANCC did not prove to be as damaging to protection of wetlands as some had initially feared because most lower courts, including the U.S. Courts of Appeal for the Fourth, Sixth, Seventh, Ninth and Eleventh Circuits, interpreted *SWANCC* as restricting federal authority only where it turned solely on the potential presence of migratory birds.[38] Only the Fifth Circuit concluded that after *SWANCC* federal jurisdiction extended only to waters that are actually navigable or adjacent to an open body of navigable water.[39] However, the decision did create substantial uncertainties concerning the scope of federal jurisdiction under the Clean Water Act.

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[37] Thoedore Roosevelt Conservation Partnership, Press Release, "Bush Administration Stands by 'No Net Loss' of Wetlands, EPA and Army Corps of Engineers Won't Issue New Rule," Dec. 16, 2003.

[38] See United States v. Deaton, 332 F.3d 698 (4th Cir. 2003); United States v. Rapanos, 339 F.3d 447 (6th Cir. 2003); United States v. Gerke, 412 F.3d 804 (7th Cir. 2005); Headwaters, Inc. v. Talent Irrigation Dist., 243 F.3d 526 (9th Cir. 2001); Parker v. Scrap Metal Processors, Inc., 386 F.3d 993 (11th Cir. 2004).

IV. THE *RAPANOS* DECISION

Confusion over the scope of federal jurisdiction under the Act was compounded in 2006 by the Supreme Court's *Rapanos* decision. The decision came about after the Court agreed to review two Sixth Circuit decisions that upheld federal jurisdiction over wetlands adjacent to the non-navigable tributaries of navigable waters. The *Rapanos* case involved three parcels of land near Midland, Michigan that each contain wetlands with a hydrologic connection to tributaries of navigable waters. Wetlands on two of the parcels drain intermittently through a manmade ditch to a creek that flows into navigable waters. Wetlands on the third site are in close proximity to the Pine River that flows into Lake Huron. After being advised by a consultant that he would need to obtain §404 permits to develop the land, John Rapanos, the owner of the parcel, ordered the consultant to destroy his report and hired contractors to perform $1 million worth of clearing and filling on the three sites. Deliberately defying both a cease-and-desist letter by the Michigan Department of Natural Resources and an administrative compliance order by EPA, Rapanos filled wetlands on each of the sites. He was convicted of a criminal violation of the Clean Water Act, fined $185,000 and sentenced to three years probation.

Although Rapanos's criminal conviction initially was vacated by the Supreme Court for reconsideration in light of *SWANCC*, the Sixth Circuit reinstated it and the Supreme Court subsequently denied review.[40] However, the Court later agreed to hear Rapanos' appeal from a civil judgment against him in United States v. Rapanos.[41] It also agreed to review a case called *Carabell*, which involved a 20-acre tract of land, 16 acres of which is forested wetlands a mile from Lake St. Clair, the same Michigan lake whose proximity to the wetlands had been at issue in *Riverside Bayview*.

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[39] In Rice v. Harken Exploration Co., 250 F.3d 264 (5th Cir. 2001) and In re Needham, 354 F.3d 340 (5th Cir. 2003).

[40] 339 F.3d 447 (6th Cir. 2003), cert. denied 541 U.S. 972 (2004).

The Carabell property contains a drainage ditch, excavated from the wetland several decades before, which created an earthen berm composed of sidecasted material. While the berm blocks immediate drainage of surface water from the wetlands into the ditch, which is connected to a tributary of Lake St. Clair, it is overtopped when water levels are particularly high and it contains drainage cuts to facilitate water flow from the wetland into the ditch. While the Sixth Circuit had no problem finding that it was an adjacent wetland subject to federal jurisdiction under §404,[42] the Supreme Court agreed to review this decision and consolidated the case with the *Rapanos* case. On June 19, 2006, a sharply-divided Court split 4-1-4 in deciding the consolidated cases.

In an opinion authored by Justice Scalia, a plurality of four Justices (including Chief Justice Roberts, Justice Thomas and Justice Alito) endorsed a radically restrictive interpretation of "waters of the United States" that would have significantly narrowed the scope of federal jurisdiction under the Clean Water Act had it commanded a majority of the Court.[43] While rejecting the petitioners urging to rewrite the Act to apply only to waters navigable in fact or susceptible of being so rendered, the plurality relied on a 1954 dictionary definition of "waters" to conclude that it includes "only relatively permanent, standing or flowing bodies or water." Addressing the difficulty of squaring this conclusion with the Court's unanimous holding in *Riverside Bayview*, the plurality creatively explained "*Riverside Bayview* rested upon the inherent ambiguity in defining where water ends and abutting ("adjacent") wetlands begin, permitting the Corps' reliance on ecological considerations *only to resolve that ambiguity* in favor of treating all abutting wetlands as waters."[44]

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[41] 376 F.3d 629 (6th Cir. 2004).

[42] Carabell v. U.S. Army Corps of Engineers, 391 F.3d 704 (6th Cir. 2004).

[43] Rapanos v. United States, 126 S.Ct. 2208 (2006).

In an opinion authored by Justice Stevens, four dissenting Justices (including Justices Souter, Ginsburg & Breyer) argued that federal Clean Water Act jurisdiction extends to wetlands adjacent to non-navigable tributaries of navigable waters. They argued that the case was squarely controlled by the Court's unanimous decision in *Riverside Bayview* and that contrary interpretations were inconsistent with the legislative history and purposes of the Clean Water Act.

> "The Army Corps has determined that wetlands adjacent to tributaries of traditionally navigable waters preserve the quality of our Nation's waters by, among other things, providing habitat for aquatic animals, keeping excessive sediment and toxic pollutants out of adjacent waters, and reducing downstream flooding by absorbing water at times of high flow. The Corps' resulting decision to treat these wetlands as encompassed within the term 'waters of the United States' is a quintessential example of the Executive's reasonable interpretation of a statutory provision."[45]

Neither of these opinions commanded a majority of the Court because the decisive ninth vote was cast by Justice Kennedy who wrote an opinion concurring only in the judgment that the decision below should be reversed and the case remanded to the lower court. Fortunately, Justice Kennedy sharply rejected the radical narrowing of the Act advocated in the Scalia opinion and he acknowledged the importance of broadly protecting wetlands. While he agreed with much of the dissent, he supported a remand because he wanted the court below to apply a new standard he articulated in his concurrence. Justice Kennedy concluded that "to constitute 'navigable waters' under the

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[44] 126 S.Ct. at 2226 (emphasis in original).

[45] Rapanos v. United States, 126 S.Ct. 2208, 2252 (Stevens, J., dissenting).

Act, a water or wetland must possess a 'significant nexus' to waters that are or were navigable in fact of that could reasonably be so made." Thus, in Justice Kennedy's view, to successfully assert federal jurisdiction under the Act the government must show that "the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable'." He noted that if the effects are only "speculative or insubstantial" the wetlands will not be subject to federal jurisdiction, but he concluded that a "reasonable inference of ecological interconnection" can be drawn for wetlands adjacent to navigable waters and that he would defer to "regulations defining for what wetlands adjacent to non-navigable tributaries of navigable waters such inferences reasonably can be made."[46]

Because he cast the decisive vote in the case, Justice Kennedy's view of the applicable law now appears to be controlling even though it was rejected by all eight of the other Justices. Justice Kennedy himself emphatically rejected the view of the four-Justice plurality opinion authored by Justice Scalia. He argued that the limitations it seeks to impose on federal jurisdiction "are without support in the language and purposes of the Act or in our cases interpreting it." He explained that the "plurality's first requirement -- permanent standing water or continuous flow, at least for a period of 'some months' -- makes little practical sense in a statute concerned with downstream water quality" and has no support in the statutory text even when dictionary definitions of "waters" are applied. Justice Kennedy argued that "exclusion of wetlands lacking a continuous surface connection to other jurisdictional waters -- is also unpersuasive" because wetlands are not "'*indistinguishable*' from waters to which they bear a surface connection." Thus, he concluded that "the plurality's opinion is inconsistent with the Act's text, structure, and purpose."[47]

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[46] Rapanos, 126 S.Ct. at 2248 (Kennedy, J., concurring in the judgment).

Justice Kennedy and the four dissenting Justices also rejected the plurality's notion that federal jurisdiction should be interpreted narrowly to avoid constitutional concerns. As Justice Kennedy emphasized in his opinion, 33 states and the District of Columbia filed an amicus brief supporting a broad interpretation of federal jurisdiction because it "protects downstream States from out-of-state pollution that they cannot themselves regulate".[48]

Addressing the administrative difficulties of applying his "substantial nexus" approach to defining federal jurisdiction, Justice Kennedy suggested that "[t]hrough regulations or adjudication, the Corps may choose to identify categories of tributaries that, due to their volume of flow (either annually or on average), their proximity to navigable waters, or other relevant considerations, are significant enough that wetlands adjacent to them are likely, in the majority of cases, to perform important functions for an aquatic system incorporating navigable waters." For wetlands adjacent to navigable-in-fact waters, Justice Kennedy concluded that adjacency can be sufficient for the Corps to establish jurisdiction. "Absent more specific regulations, however, the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to non-navigable tributaries." Justice Kennedy states that "[w]here an adequate nexus is established for a particular wetland, it may be permissible, as a matter of administrative convenience or necessity, to presume covered status for other comparable wetlands in the region."[49]

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[47] 126 S.Ct. at 2246 (Kennedy, J., concurring in the judgment).
[48] 126 S.Ct. at 2246 (Kennedy, J., concurring in the judgment).

The four dissenting Justices agreed that Justice Kennedy's "significant nexus" test probably will "not do much to diminish the number of wetlands covered by the Act in the long run."[50] Indeed, Justice Kennedy himself noted that the very wetlands at issue in *Rapanos* and *Carabell* are likely to satisfy his "significant nexus" test. He concludes that

> "the end result in these cases and many others to be considered by the Corps may be the same as that suggested by the dissent, namely, that the Corps' assertion of jurisdiction is valid. Given, however, that neither the agency nor the reviewing courts properly considered the issue, a remand is appropriate, in my view, for application of the controlling legal standard."[51]

However, as the four dissenting Justices noted, by requiring site-specific assessments, Justice Kennedy's approach will impose an additional administrative burden that will delay the processing of permit applications and create greater uncertainty for all concerned. "These problems are precisely the ones that *Riverside Bayview*'s deferential approach avoided."[52]

For now, the end product of *Rapanos* is that the scope of federal jurisdiction under the Clean Water Act is highly confused. In an unusual concurring opinion, Chief Justice Roberts described the result of the 4-1-4 split as "unfortunate" because "no opinion commands a majority of the Court on precisely how to read Congress' limits on the reach of the Clean Water Act." As a result, he noted, "Lower courts and regulated entities will now have to feel their way on a case-by-case basis." Surprisingly, he suggested that the situation "readily . . . could have been avoided" if the Army Corps of Engineers had issued new regulations after *SWANCC* clarifying the limits of its jurisdictional reach. Citing *Chevron*, the Chief Justice noted "Given the broad, somewhat ambiguous, but nonetheless clearly limiting terms Congress employed in the Clean Water Act, the Corps and the EPA would have enjoyed plenty of room to operate in developing *some* notion of an outer bound to the reach of their authority."[53] Yet because the Chief Justice joined in full Justice Scalia's plurality opinion, which rejected any deference to a broader definition of "waters of the United States" than the one articulated by Justice Scalia, the Chief Justice's concurrence contributes further to the confusion.

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[49] 126 S.Ct. at 2249 (Kennedy, J., concurring in the judgment).
[50] 126 S.Ct. at 2264 (Stevens, J., dissenting).
[51] 126 S.Ct. at 2250 (Kennedy, J., concurring in the judgment).
[52] 126 S.Ct. at 2265 (Stevens, J., dissenting).

While purporting to interpret Congressional intent, the opinions of the Justices in *Rapanos* reflect a much more fundamental split that permeates much of the Court's jurisprudence in reviewing regulatory decisions by administrative agencies.[54] Four Justices (Justices Scalia, Thomas, Chief Justice Roberts and Justice Alito) join an opinion expressing extreme hostility to a long-standing regulatory interpretation (referring to it as a 30-year old "entrenched executive error" and stating that it "would authorize the Corps to function as a de facto regulator of immense stretches of intrastate land--an authority the agency has shown its willingness to exercise with the scope of discretion that would befit a local zoning board").[55] Four other Justices (Justices Stevens, Souter, Ginsburg and Breyer) vote to uphold the regulation because they are willing to defer to the judgment of a federal agency that it is essential to achieving the Congressional purpose. The Justice in the middle – Justice Kennedy – acknowledges the importance of the regulatory goal while seeking to impose new procedural requirements on the agency to avoid overreaching.

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[53] 126 S.Ct. at 2236 (Roberts, C.J., concurring).

[54] For a more detailed discussion contrasting the precautionary and reactive approaches to environmental regulation embraced by different members of the judiciary, see Robert V. Percival, Environmental Law in the 21st Century, 25 Va. Env. L. J. 1, 9-18 (2007).

[55] Rapanos, 126 S.Ct. at 2224 (Scalia, J., plurality opinion).

Justice Scalia's group of Justices made highly exaggerated claims that §404 imposes high costs on landowners while appearing dismissive of the ecological costs of filling wetlands. Justice Kennedy correctly calls Scalia's opinion "unduly dismissive" of the "[i]mportant public interests . . . served by the Clean Water Act in general and by the protection of wetlands in particular."[56] In a footnote Justice Stevens criticizes the plurality's "antagonism to environmentalism" and its claim that his dissent is "policy-laden" by observing that "[t]he policy considerations that have influenced my thinking are Congress' rather than my own."[57] This debate illustrates the sharply contrasting views concerning the value of federal regulatory programs to protect the environment among the Justice currently on the Court, a split most recently illustrated by the Court's 5-4 decision in *Massachusetts v. EPA.*[58]

V. CONFUSION IN THE WAKE OF *RAPANOS*

The *Rapanos* decision has spawned considerable and understandable confusion over the scope of federal jurisdiction under the Clean Water Act. Within days of its announcement, legal challenges premised on *Rapanos* were being made to environmental enforcement actions far beyond the context of the §404 program. Nine days after *Rapanos* was decided a federal district court in Texas dismissed a federal enforcement action under the Oil Pollution Act for an oil spill from a pipeline that drained into two ephemeral streams in Texas before reaching open waters.[59] Like the Clean Water Act, the Oil Pollution Act defines "navigable waters" to mean "waters of the United States, including the territorial sea."[60] Noting that Justice Kennedy's "significant nexus" test "leaves no guidance on how to implement its vague, subjective centerpiece," the court instead applied "prior reasoning in this circuit" that had narrowly interpreted the scope of federal jurisdiction.

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[56] 126 S.Ct. at 2246 (Kennedy, J., concurring in the judgment).

[57] 126 S.Ct. at 2259 n.8 (Stevens, J., dissenting).

[58] 127 S.Ct. 1438 (2007) (A five-Justice majority – Justices Stevens, Kennedy, Souter, Ginsburg and Breyer -- held that the Clean Air Act does give jurisdiction to EPA to regulate emissions of greenhouse gases that contribute to global warming and climate change and that states have standing to challenge EPA's failure to regulate them over harsh dissents on each issue from Justice Scalia and Chief Justice Roberts, joined by Justices Thomas and Alito).

[59] U.S. v. Chevron Pipe Line Co., 437 F.Supp. 2d 605 (N.D. Tex. 2006).

The U.S. Court of Appeals are split on the proper test to apply in the wake of *Rapanos*. The First Circuit has held that federal jurisdiction under the Clean Water Act may be asserted if *either* the test of the plurality *or* Justice Kennedy's "significant nexus" test is satisfied, though one dissenting judge in the 2-1 panel decision argued that only the plurality's "hydrological connection" test should apply instead.[61] The Seventh Circuit and Ninth Circuit have held that only Justice Kennedy's test is controlling.[62]

In a case in federal district court in Washington, D.C., the American Petroleum Institute and Marathon Oil Company are arguing that *Rapanos* has invalidated Oil Pollution Prevention and Response regulations adopted by EPA in July 2002 because their coverage is premised on a pre-*Rapanos* understanding of the scope of federal authority.[63] One group of amici in that case are arguing alternatively that "any legal standard as amorphous as the Kennedy 'significant nexus' test raises due process concerns and should be avoided."[64]

While only time will tell how lower courts sort out the confusion engendered by the Court's 4-1-4 split in *Rapanos*, it would be highly damaging for the environment if *Rapanos* leaves a significant portion of wetlands adjacent to the nonnavigable tributaries of navigable waters unprotected by §404. Justice Kennedy's plurality opinion does not seem to contemplate such a result, though it may yet transpire due to the administrative difficulties of conducting case-by-case assessment under his amorphous "significant nexus" test. While Justice Kennedy and Chief Justice Roberts urged the Corps to issue new regulations to ease this burden, the guidance document released by EPA and the Corps last month does not appear to be directly responsive to these invitations.

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[60] 33 U.S.C. §2701(21).

[61] U.S. v. Johnson, 467 F.3d 56 (1st Cir. 2006).

[62] U.S. v. Gerke Excavating, Inc., 464 F.3d 723 (7th Cir. 2006); No. Calif. River Watch v. City of Healdsburg, 457 F.3d 1023 (9th Cir. 2006).

[63] American Petroleum Institute v. Johnson, No. 1:02-cv-02254-PLF (D.D.C.)

[64] Brief Amicus Curiae of Pacific Legal Foundation, et al., in Support of Plaintiffs in American Petroleum Institute v. Johnson, No. 1:02-cv-02254-PLF (D.D.C.), March 2, 2007.

On June 5, 2007, EPA and the Corps jointly issued a guidance document on "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States and Carabell v. United States*."[65] A Question and Answer sheet distributed with the guidance specifies that it is not intended to "either expand or contract CWA jurisdiction, but rather to effectively implement the decision by the Supreme Court in *Rapanos*."[66] The guidance generally provides federal jurisdiction may be asserted over waters that meet either Justice Kennedy's "significant nexus" test or the plurality's "hydrological connection" test.

The guidance states that the agencies will continue to assert jurisdiction over (1) traditional navigable waters, (2) wetlands adjacent to traditional navigable waters, (3) non-navigable tributaries of traditional navigable waters that are relatively permanent (with a typical year-round or seasonal flow), and (4) wetlands that directly abut such tributaries. It provides that jurisdictional decisions will be made "based on a fact-specific analysis to determine whether [the following] have a significant nexus with a traditional navigable water:" (1) non-navigable tributaries that are not relatively permanent, (2) wetlands adjacent to non-navigable tributaries that are not relatively permanent, and (3) wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary. Jurisdiction generally will not be asserted over swales or erosional features that carry low-volume, infrequent or short duration flows and ditches draining only uplands that do not carry a relatively permanent flow of water. The guidance is relatively nebulous concerning how to establish a site-specific showing of significant nexus, citing various considerations such as flow characteristics and functions of tributaries and hydrologic and ecologic factors.

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[65] 72 Fed. Reg. 31824 (June 8, 2007).

[66] Corps and EPA Responses to the *Rapanos* Decision, Key Questions for Guidance Release (June 2007).

It is not possible to predict with precision what effect the guidance and *Rapanos* will have over the scope of federal jurisdiction. Prior to the issuance of the Court's decision EPA stated that 53% of streams in the U.S. (excluding Alaska) were headwater streams and that 59% were either intermittent or ephemeral, putting them at risk if the Corps' interpretation of "waters of the United States" was rejected. EPA and the Corps now assert their belief that "many of these streams will be able to satisfy one of the standards established in the *Rapanos* decision."[67] The question of how difficult and expensive it will be to establish that these areas satisfy one of the standards remains an important concern.

The consequences of a substantially more restrictive interpretation of the scope of federal jurisdiction clearly extend beyond the §404 program. As the government noted in its brief in *Rapanos*, the same term "defines the scope of regulatory jurisdiction to be exercised under other provisions of the CWA. See, *e.g.*, 33 U.S.C. 1342 (pollutant discharge permits); 33 U.S.C. 1321 (oil-spill prevention and clean-up); 33 U.S.C. 1313 (water quality standards)."[68] Thus, it is not surprising that the confusion *Rapanos* created for the §404 permit program is now spreading to other vital programs to protect the environment from water pollution and oil spills. A more restrictive interpretation of the scope of federal authority will enable polluters to dump their pollutants in areas not subject to federal jurisdiction.[69]

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[67] Ibid.
[68] Brief for United States, Rapanos v. United States, at 20.

VI. CONCLUSION: CONGRESS SHOULD CLARIFY THE SCOPE OF FEDERAL JURISDICTION UNDER THE CLEAN WATER ACT

In light of the enormous confusion created by the Court's 4-1-4 split in *Rapanos*, Congress should act to amend the Clean Water Act to clarify the scope of federal jurisdiction over the "waters of the United States." In the wake of *Rapanos* lower courts are now applying either or both of two approaches that have been expressly rejected by a majority of the Justices of the Supreme Court. Indeed, the most prevalent response to *Rapanos* has been case-by-case application of the amorphous "significant nexus" test -- a test that is rejected by all the Justices of the Court save for its author, Justice Kennedy.

The *Rapanos* decision also has spurred litigation challenging other federal programs to prevent or remediate oil spills and to control other forms of water pollution. These are problems that cannot easily be fixed through an agency rulemaking or adjudication, which is likely to take years without resolving the fundamental interpretative split among the Justices that is at the root of *Rapanos*.

The simplest approach would be for Congress to return the scope of federal jurisdiction under the Clean Water Act to that which prevailed prior to *SWANCC* and *Rapanos*. This approach should command bipartisan support because it would endorse the very interpretation of "waters of the United States" so ably advanced by the Bush administration in both cases. This approach also would ensure that agencies need not revise regulations that predate *SWANCC* and *Rapanos*. It would promote legal stability by retaining long-held interpretations well known to agency officials and the private bar.

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[69] See Lance D. Wood, Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands, 34 Env. L. Rep. 10187, 10195-96 (2004).

There is an easy way to accomplish this goal. Congress should adopt legislation making unmistakably clear that it intends for the scope of federal jurisdiction under the Clean Water Act to provide protection to the waters of the United States to the fullest extent of legislative authority under the Constitution. In a separate dissenting opinion in *Rapanos* Justice Breyer explained his view that "the authority of the Army Corps of Engineers under the Clean Water Act extends to the limits of congressional power to regulate interstate commerce." Congress should respond to *SWANCC* and *Rapanos* by simply confirming this understanding. Because the nation's waters "are so various and so intricately interconnected," the only way to achieve the Congressional goal of restoring and maintaining their "chemical, physical, and biological integrity" "is to write a statute that defines 'waters' broadly and to leave the enforcing agency with the task of restricting the scope of that definition, either wholesale through regulation or retail through development permissions."[70] This is what Congress tried to do, even though the Supreme Court has now ruled that Congress did not speak clearly enough for it to get the message.

To be sure, some of the Court's confusion is understandable because of the use of the term "navigable waters," which confusingly invokes an entirely different era of federal regulatory interest predating the birth of comprehensive federal programs to protect the environment. As discussed in Part I above,[71] a comprehensive federal regulatory program to protect the nation's waters rests on firm constitutional foundations wholly apart from the concept of navigability, as even Justice Rehnquist explicitly acknowledged.[72]

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[70] 126 S.Ct. at 2266 (Breyer, J., dissenting).
[71] See text at pp. 5-6, supra.

Next spring while on sabbatical I will be teaching environmental law in China as a J. William Fulbright Scholar. I will have the privilege of working with some of China's top environmental law professors and public interest lawyers who are fighting against long odds to strengthen their country's environmental laws to combat horrendous pollution problems that seriously threatens public health. The U.S. has avoided the dire problems afflicting China's water resources today in large part because of the strength of our Clean Water Act. It would be most unfortunate if the U.S., which is urging developing countries to upgrade their environmental laws, were to allow erosion of the vital protections this Act provides.

Justice Scalia concluded part of his plurality opinion in *Rapanos* by dismissing fears that "narrowing the definition of 'the waters of the United States' will hamper federal efforts to preserve the Nation's wetlands." He deemed such fears irrelevant by blaming Congress for not enacting "a Comprehensive National Wetlands Protection Act," the "wisdom" of which he declared to be "beyond our ken." He concluded: "What is clear, however, is that Congress did not enact one when it granted the Corps jurisdiction over only 'the *waters* of the United States.'"[73] Congress is uniquely capable of setting Justice Scalia straight.

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[72] Kaiser Aetna v. United States, 444 U.S. 164, 173 (1979). See also Environmental Law Institute, Anchoring the Clean Water Act: Congress's Constitutional Sources of Power to Protect the Nation's Waters, July 2007.

[73] Rapanos v. United States, 126 S.Ct. at 2228 (2006).

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"Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act."

Full Committee U.S. House Transportation and Infrastructure

Montana Governor Brian Schweitzer

July 17, 2007

The Clean Water Act has been a tremendous success in cleaning up and protecting Montana's and the nation's lakes, rivers, trout streams, and wetlands. We urge you to support the Clean Water Authority Restoration Act, a bill that was introduced in the last Congress that is expected to be reintroduced soon, in order to ensure that the Act continues to safeguard all of the State's waters that have been historically protected by this important law.

The State of Montana contains hundreds of thousands of acres of water resources including streams, rivers, lakes and wetlands. Water is one of Montana's greatest resources. Therefore, we are very concerned about any possible loss of Clean Water Act jurisdiction over these waters since they provide drinking water, revenue, wildlife habitat and aesthetic beauty for the enjoyment of everyone living in or visiting the "Last Best Place."

In recent years, long-settled Clean Water Act principles have been undermined by two narrowly divided U.S. Supreme decisions that have unreasonably questioned whether Congress intended the law to protect certain streams, rivers, wetlands and other waters that are not "navigable in fact" but that have, in fact, been covered by the federal law for over 30 years.

These decisions, in the SWANCC case in 2001 and the 2006 Rapanos-Carabell cases, have opened the door for polluting industries to begin an on-going campaign to erase decades of progress in cleaning up the nation's rivers, lakes, streams, ponds, wetlands and coastal waters by working to eliminate Clean Water Act protections for the majority of the nation's streams, rivers, and wetlands.

The waters in Montana most at risk of now losing federal Clean Water Act protections include creeks, small streams, seasonal rivers and waters, and depressional wetlands, fens, wet meadows, and slope wetlands. These waters in Montana are critical to our rural economy. Farmers and ranchers alike rely on access to clean water and on-going drought conditions of the past several years have heightened our awareness of their needs. Tourism is also very significant to Montana and supports an important recreational component of our economy. Just last week, some Montana rivers and streams were being closed to fishing due to low flows and high water temperature which threaten aquatic life. These streams also provide many critical functions to our urban residents. For example, more than 340,000 Montanans rely on public drinking water systems that get some or all of their water from intermittent or headwater streams.

Of Montana's 192,198 total stream miles, we estimate that 136,002 miles are intermittent or headwater streams – 71% percent of all stream miles in the State. If the scope of "waters of the United States" were reduced to only those streams that have perennial flow or are traditionally navigable, Montana would lose federal Clean Water Act support over the majority of stream miles in the state.

All ephemeral, intermittent and perennial streams within Montana are tributaries to three federally navigable waterways in Montana – the Missouri, Yellowstone and Kootenai or are tributaries to interstate navigable waters such as the Clark Fork. We believe that all upstream tributaries to these waters along with wetlands are an integral part of our nation's watersheds and thus affect the health of all waters of the United States.

With respect to wetlands, we estimate that the State contains approximately 840,300 acres of wetlands, roughly 0.9 percent of the State. But while wetlands cover only a small part of Montana, the ecologic and economic importance of these waters far outweighs their relative size.

For example, certain depressional wetlands could be considered to be 'isolated' and thus outside the scope of the Clean Water Act based on the recent court decisions are located within a half mile of the Big Blackfoot River, a blue ribbon trout stream, drinking water source, tourist magnet and national treasure made famous by the movie "A River Runs Through It." Imagine a 50-gallon drum of PCB's or other highly mobile bioaccumulating pollutant, such as mercury, leaking into one of these depressional wetlands. There would be a high probability that a ground water to surface water connection exists to transport contaminate from the wetland into the Blackfoot River. This is an example of a hydrologic connection between 'isolated' waters and "waters of the United States." The isolated wetland needs to be protected to protect the river.

Other types of non-adjacent wetlands and waters in Montana that could be potentially affected by any limitation on the scope of jurisdictional waters include fens, wet meadows, seeps, slope wetlands, ponds and lakes. These unique ecosystems provide water to an otherwise arid and often harsh landscape. Wetland areas such as fens, wet meadows and ponds are critical to maintaining healthy species diversity and keeping species off the Federal threatened and endangered species list.

We believe that it is critical to retain Clean Water Act jurisdiction to regulate deposition or fill, discharge of pollutants and other deleterious activities even within so-called 'isolated' waters.

Passage of the Clean Water Authority Restoration Act is the best way to ensure that all of the water resources in Montana remain fully protected, reaffirm Congress' original intent to eliminate pollution at its source, and restore clarity and certainty to the law we and most other states rely upon to limit water pollution.

The bill reaffirms that the Act is intended to cover all of the waters of the United States. It does so by replacing the term 'navigable waters' and replaces it with the term 'waters of the United States.' This term is then defined based on the definition used by the U.S. EPA and Army Corps of Engineers in their Clean Water Act implementing regulations since the early 1970s. Finally, the bill bolsters Congress' authority to protect these categories of waters using all of its legislative authorities under the U.S. Constitution.

Again, we urge you to co-sponsor the Clean Water Authority Restoration Act to provide a clean and healthy future for Montana and the nation.

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Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands (A Response to the Virginia Albrecht/Stephen Nickelsburg *ELR* Article, to the Fifth Circuit's Decision *In re Needham*, and to the Supreme Court's Dicta in *SWANCC*)

by Lance D. Wood

The September 2002 edition of the *Environmental Law Reporter's (ELR's) News & Analysis* published a truly remarkable Article: *Could* SWANCC *Be Right? A New Look at the Legislative History of the Clean Water Act*, by Virginia S. Albrecht and Stephen M. Nickelsburg.[1] A casual reader of the Article might not understand how revolutionary and far-reaching the conclusions and analysis of that Article are, regarding the geographic jurisdiction of the Clean Water Act (CWA).[2] In fact, the authors seem to go to some lengths to conceal the radical implications of their own conclusions while admitting that their Article does seek to overturn "long-entrenched assumptions" that the federal courts and agencies that implement the CWA have had for more than three decades regarding the extent of the CWA's geographic jurisdiction.[3]

Read carefully and with an understanding of the subject matter, the Albrecht/Nickelsburg Article asserts the following: based on Albrecht's and Nickelsburg's interpretation of the U.S. Supreme Court's decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers*,[4] plus those authors' highly innovative reading of the legislative history of the Federal Water Pollution Control Act (FWPCA) of 1972, i.e., the first effective federal CWA, the geographic jurisdiction of the CWA at present is actually only a tiny fraction (my estimate is less than 1%) of what the U.S. Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers (the Corps), and other federal agencies, plus most of the federal courts, had previously believed. According to the Albrecht/Nickelsburg Article, the geographic jurisdiction of the CWA since 1972 has always been limited essentially to those major U.S. waterways that currently support (or historically supported) commercial navigation, plus some wetland areas that actually and directly adjoin open water areas of those "traditional navigable waters of the United States." Most significantly, the Albrecht/Nickelsburg Article asserts that none of the myriad non-navigable tributaries of the navigable waters have ever been subject to CWA jurisdiction. That disturbing conclusion follows naturally from the Albrecht/Nickelsburg assertion that the FWPCA of 1972 did not assert jurisdiction over any non-navigable tributaries, and that later amendments of the CWA, such as the FWPCA Amendments of 1977, did not clearly and explicitly assert jurisdiction over such tributaries. Consequently, the Albrecht/Nickelsburg Article effectively claimed that the CWA of today has no jurisdiction over any non-navigable tributaries (unless, that is, some unknown legal scholar in the future can find a clear and explicit statement in the FWPCA Amendments of 1977 that asserted CWA jurisdiction over such tributaries, a contingency that Albrecht and Nickelsburg apparently believe to be impossible).

If the Albrecht/Nickelsburg Article were correct, then the FWPCA of 1972 could never have addressed, and the CWA of today could not address, the problem of water pollution with any degree of effectiveness because (after that Article's revelations) any person or corporation wanting to dispose of toxic chemical wastes or any other pollutant could dump those pollutants into any non-navigable tributary stream that flows into the traditional navigable waters, or dump pollutants into wetlands adjacent to that tributary stream, free of any CWA prohibition or restriction, and immune from any possible CWA civil or criminal penalty. The fact that such potentially toxic pollutants dumped irresponsibly (but very economically) into non-navigable tributaries would soon wash downstream with the receiving waters, would be taken into the out-take pipes for our nation's public drinking water supplies, and would poison people, as well as fish, shellfish, and wildlife, is not discussed as a concern in the Albrecht/Nickelsburg Article. If one were to believe and take seriously the assertions of the Albrecht/Nickelsburg Article regarding past and present CWA jurisdiction, one would have to conclude that its authors

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[1] Virginia S. Alhrecht & Stephen M. Nickelsburg, *Could* SWANCC *Be Right? A New Look at the Legislative History of the Clean Water Act*, 32 ELR 11042 (Sept. 2002).

[2] 33 U.S.C. §§1251-1387, ELR Stat. FWPCA §§101-607. For purposes of simplicity and convenience, this Article sometimes uses the familiar term "CWA" to refer to the Federal Water Pollution Control Act (FWPCA) of 1972, and its subsequent Amendments in 1977 and 1987. This Article uses the term FWPCA of 1972 when referring specifically to that enactment, Pub. L. No. 92-500, 866 Stat. 844 (Oct. 18, 1972).

[3] *See* Albrecht & Nickelsburg, *supra* note 1, at 11043.

[4] 531 U.S. 159, 31 ELR 20382 (2001).

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have discovered "the Holy Grail" of polluters: the proverbial "Dumpers Bill of Rights," rendering the CWA a toothless nullity.

Since the publication of the Albrecht/Nickelsburg Article in September 2002, I have waited patiently for *ELR* to publish a follow-up Article doing one of two things: first, some learned professor of law could publish a full refutation of the Albrecht/Nickelsburg Article, exposing its conclusions and analysis as erroneous, which they assuredly are. In the alternative, Albrecht and Nickelsburg could publish an admission that their Article was actually intended to be a lengthy, humorous hoax, comparable to similar literary hoaxes perpetrated by earlier writers such as Benjamin Franklin, H.L. Mencken, and Mark Twain. Of course, the humorous point of the original Albrecht/Nickelsburg Article would be that clever lawyers can "prove" virtually anything about a statute through a creative and highly selective use of legislative history materials.

Since September 2002, I have been disappointed to see that neither of those two types of follow-up Article has been published in *ELR*. That fact left open the possibility that some unwary reader of the Albrecht/Nickelsburg Article, e.g., a federal judge, a law clerk working for a federal court, a practicing lawyer, or a potential polluter, who is not familiar with this specialized area of the law could read and accept the Albrecht/Nickelsburg Article, in whole or in part, as a sound and reliable legal analysis of the past and current jurisdiction of the CWA.[5] That Article could even be regarded as "authority," and its conclusions could be adopted and followed by some federal court decision.

In fact, the Albrecht/Nickelsburg Article and its conclusions are all too likely to be embraced by certain legal practitioners, polluters, or even judges who consider themselves opponents of federal regulation or as advocates of the "private property rights" movement because the Article provides a colorable, superficially plausible legal basis for reaching a result that some very much desire, i.e., rolling back federal environmental regulation, and curtailing the jurisdiction of the CWA in particular. The fact that some federal judges were and are predisposed to reach that result is common knowledge and was reflected in *obiter dicta* in the U.S. Court of Appeals for the Fifth Circuit's decision, *Rice v. Harken Exploration Co.*,[6] and in several federal district court decisions cited with approval in the Albrecht/Nickelsburg Article.[7] As discussed hereinafter, even the Court's majority decision in *SWANCC* contains some ill-considered *obiter dicta* language that has been exploited by the Albrecht/Nickelsburg Article, the *Rice* Fifth Circuit panel, and others to support the allegation that the CWA currently has no jurisdiction over non-navigable tributaries.

On December 16, 2003, my fears appeared to be realized when a three-judge panel of the U.S. Court of Appeals for the Fifth Circuit handed down its decision *In re Needham*.[8] In that decision the Fifth Circuit restated as *obiter dicta* the assertions that CWA jurisdiction is limited essentially to navigable-in-fact waters, as the Fifth Circuit had earlier stated as dicta in *Rice*. According to the *Needham* decision's dicta:

> The CWA [is] not so broad as to permit the federal government to impose regulations over "tributaries" that are neither themselves navigable nor truly adjacent to navigable waters.[9] Consequently, in this circuit . . . a body of water is subject to regulation [under the CWA only] if the body of water is actually navigable or adjacent to an open body of navigable water.[10]

To be sure, the Fifth Circuit's pronouncements in *Needham* regarding the alleged lack of CWA jurisdiction over non-navigable tributaries are *obiter dicta*, as were similar Fifth Circuit assertions in *Rice*. Moreover, when one reads carefully the entirety of the Fifth Circuit's *Needham* decision, one notices many ambiguities and unanswered questions about precisely what that decision's dicta means. For example, it is unclear what water bodies the Fifth Circuit's *Needham* panel would consider to be "adjacent" to navigable-in-fact water bodies, etc. Nevertheless, one can only conclude from the emphatic dicta in the *Needham* and *Rice* decisions that the Fifth Circuit is likely to adopt a narrow interpretation of CWA jurisdiction whenever a case eventually is decided by that court of appeals requiring an actual holding of law governing the subject.

The fundamental CWA jurisdictional issues addressed in the Albrecht/Nickelsburg Article, in the *obiter dicta* of the Fifth Circuit's *Needham* and *Rice* decisions, and by dicta in the Court's *SWANCC* decision, are of great importance to the United States, its environment, and the health and welfare of its people. As discussed hereinafter, there now appears to be a likely future split among the federal circuits regarding what the remaining jurisdiction of the CWA is after *SWANCC*, so the Court will probably have to clarify the matter sooner or later. Because the assertions regarding CWA jurisdiction made by the Albrecht/Nickelsburg Article, the Fifth Circuit's *Needham* and *Rice* dicta, and the inac-

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[5] The authors of the Albrecht/Nickelsburg Article represented it to be an objective, reliable piece of legal scholarship. Nevertheless, as a reader considers whether Albrecht and Nickelsburg are really disinterested legal scholars regarding this subject, one should know that both Albrecht and Nickelsburg have been actively involved as advocates representing various development interests and in litigating cases that raise the same fundamental legal issues concerning CWA jurisdiction that their Article addresses. For example, the recent decisions of the U.S. Court of Appeals for the Fourth Circuit in *United States v. Deaton*, 332 F.3d 698, 33 ELR 20223 (4th Cir. 2003), and *United States v. Newdunn Associates*, 344 F.3d 407 (4th Cir. 2003), and the decision of the U.S. Court of Appeals for the Sixth Circuit in *United States v. Rapanos*, 339 F.3d 447, 33 ELR 20249 (6th Cir. 2003), cite Albrecht and Nickelsburg as attorneys on the brief for the defendants or as attorneys for amici curiae supporting the defendants. Similarly, Albrecht presented oral argument and otherwise advocated on behalf of the defendants in the Fifth Circuit case, *In re Needham*, No. 02-30217 (5th Cir. Dec. 16, 2003).

[6] 250 F.3d 264, 31 ELR 20599 (5th Cir. 2001).

[7] See the decisions cited in Albrecht & Nickelsburg, *supra* note 1, at 11042 n.10.

[8] No. 02-30217 (5th Cir. Dec. 16, 2003).

[9] *See Rice*, 250 F.3d at 269 n.8.

[10] *In re Needham*, No. 02-30217. The Fifth Circuit's *obiter dicta* in *Needham* presents a noteworthy example of "judicial activism" since that dicta's assertions about how very narrow the jurisdiction of the CWA allegedly is were not part of any holding of law, and were quite unnecessary to the decision of the case. The strident nature of the *Needham* dicta is reflected in a gratuitous (and misleading) quotation from that dicta, which apparently was supposed to be characterizing the EPA and Corps regulations that were upheld by Fourth Circuit and Sixth Circuit's decisions that had been cited in the *Needham* dicta just preceding the following quotation: "In this circuit the United States may not simply impose regulations over *puddles, sewers* . . . and the like . . . ." *Id.* (emphasis added). As is explained in the last footnote of this Article, that quotation is not a fair or accurate characterization of EPA or Corps regulations or of the Fourth and Sixth Circuit decisions that have upheld those regulations.

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curate dicta from the *SWANCC* decision are wrong as a matter of law and potentially disastrous to the environment and public health of the United States, a thoughtful refutation of those assertions is needed.

This Article does not purport to be a comprehensive legal analysis of either the total geographic jurisdiction of the CWA or of the full legislative history of the CWA. Similarly, this Article does not attempt to address all of the fundamental constitutional law and administrative law issues raised by the Fifth Circuit's *Needham* dicta.[11] Nonetheless, as an attorney whose legal career has been devoted in large measure to dealing with the Rivers and Harbors Act of 1899 (R&H Act of 1899), the traditional navigable waters of the United States, and with "the waters of the United States" regulated under the CWA, I hope in this Article to expose many of the significant errors of the Albrecht/Nickelsburg piece and of the Fifth Circuit's and Court's dicta that constitute much of the alleged "legal authority" relied on in that Article. I hope that this Article will help make the case that the CWA has had jurisdiction over the full tributary system of the navigable waters from 1972 to the present, and that the CWA's jurisdiction over non-navigable tributaries and their adjacent wetlands remains intact despite the Court's *SWANCC* decision and those who would exaggerate the implications of its *obiter dicta*. As John Locke once observed, one can make a contribution to human knowledge if one merely helps to clear a future building site of clutter, even if one has neither the time nor the means to build a noble edifice on the site that one has helped to clear.

Despite its many errors and misrepresentations, the Albrecht/Nickelsburg Article is really quite important to the ongoing legal debate about the post-*SWANCC* jurisdiction of the CWA, for a very telling reason. As the Albrecht/Nickelsburg Article itself explains, no federal agency and very few federal courts or legal scholars thus far have been willing to implement or even take very seriously what Albrecht and Nickelsburg allege to be the far-reaching legal implications of the *SWANCC* decision's *obiter dicta* regarding CWA jurisdiction. One primary reason why all federal agencies and most federal courts have read the *SWANCC* decision narrowly is that its *obiter dicta* seems ill-considered, unsupported by precedent or other legal authority, and generally unconvincing. The Albrecht/Nickelsburg Article describes this problem more diplomatically as follows:

> There are several possible reasons for this resistance to *SWANCC*. . . . [T]he lower courts . . . face long-entrenched assumptions that the CWA extends to the broadest possible constitutional bounds. Moreover, although the *SWANCC* opinion itself is clear, it is written in Chief Justice William H. Rehnquist's signature spare style, expending only a few paragraphs in rejecting the broad theory of CWA jurisdiction and offering no detailed discussion of why the conventional wisdom has been wrong.[12]

When one reads the discussions of post-*SWANCC* CWA jurisdiction presented in the Fifth Circuit's *Needham* and *Rice* decisions, and in the various federal district court decisions that the Albrecht/Nickelsburg Article cited with approval, one is even more struck by the paucity of thoughtful legal analysis or legal authority offered to support or justify the conclusions about CWA jurisdiction presented by those decisions. As a result, the reader of those decisions comes away with the disquieting impression that the judges writing those legal opinions well understood the result that was wanted, i.e., a radically truncated jurisdiction for the federal CWA, but were unable to find a convincing legal basis to support that result (other than ipse dixit, which is never very persuasive).

It seems likely that the Albrecht/Nickelsburg Article was written and published in *ELR* to provide an intellectually respectable foundation of legal authority and legal analysis to support and justify the dicta in *SWANCC*, *Rice*, and similar decisions, e.g., *Needham*, all of which would "roll back" the geographic jurisdiction of the federal CWA to the narrow limits of navigable-in-fact water bodies of the traditional navigable waters of the United States.[13] Obviously, Albrecht and Nickelsburg published their Article hoping that their legal analysis would be adopted and followed by federal court holdings in many future CWA cases. Nevertheless, when one examines the Albrecht/Nickelsburg Article carefully, one learns that that Article's legal analysis and conclusions are just as unpersuasive as the poorly justified dicta from the *SWANCC*, *Rice*, and *Needham* decisions that Albrecht and Nickelsburg wrote their Article to support and propagate.

At the outset, one should understand that there are some subtle differences between the ultimate conclusions of the Fifth Circuit's *Rice* and *Needham* dicta, the Court's dicta in *SWANCC*, and the conclusions of the Albrecht/Nickelsburg Article. The Fifth Circuit's dicta, as quoted above from the *Needham* decision, boldly declares that the CWA's existing jurisdiction is limited to open bodies of actually navigable waters, plus any water body immediately adjacent, i.e., immediately proximate, to actually navigable open waters. The Court's dicta in *SWANCC* was ambiguous, much less clear and definitive than the Fifth Circuit's, and thus has been open to widely varying interpretations. As a result, the federal district courts and circuit courts of appeals have interpreted the *SWANCC* precedent in totally inconsistent ways, as discussed hereinafter.

The Albrecht/Nickelsburg Article was cagey and somewhat disingenuous when presenting its ultimate conclusions concerning the CWA's existing jurisdiction. Albrecht and Nickelsburg clearly assert that the jurisdiction of the FWPCA of 1972 was limited to navigable-in-fact, open water areas of the traditional navigable waters, and that the 1972 Act excluded from its jurisdiction all non-navigable

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[11] The Fifth Circuit's dicta in *Needham* stated that the Fifth Circuit will give no deference to EPA and Corps regulations that for decades have asserted CWA jurisdiction over non-navigable tributaries. The apparent reason for that legal conclusion is that, allegedly, the U.S. Constitution gives the federal government no authority to regulate non-navigable tributaries of the traditional navigable waters of the United States (except, it seems, for a few non-navigable, tributary water bodies that are immediately proximate to those navigable waters, whatever that means). The judge who authored the *Needham* decision did not feel it necessary to cite any authority or reasoning to justify those controversial legal conclusions, other than that judge's interpretation of *SWANCC*. This Article addresses similar assertions of constitutional law in the discussion of the Corps of Engineers' final rule of April 3, 1974, *infra* notes 80-121 and accompanying text.

[12] Albrecht & Nickelsburg, *supra* note 1, at 11043.

[13] The Albrecht/Nickelsburg Article practically says as much: "The thesis of this Article is that the resistance to *SWANCC* is unfounded, and that the history of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972 shows that the Court's interpretation of Congress' original intent is correct." *Id.* at 11043.

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tributaries and all adjacent wetlands. However, the Albrecht/Nickelsburg Article also concludes that the FWPCA Amendments of 1977 expanded the 1972 Act's jurisdiction to include wetlands actually adjoining open, navigable-in-fact waters. The Albrecht/Nickelsburg Article strongly implies, but never explicitly states, that the existing CWA has no jurisdiction over non-navigable tributaries and their adjacent wetlands, leaving open the unlikely but theoretical possibility that some unknown person in the future might identify either "clear text" or "evidence of clear congressional intent" from the FWPCA Amendments of 1977 to justify the inclusion of some unspecified class of non-navigable tributaries as part of the existing CWA's jurisdiction.[14]

My Article tries to take into account the subtle distinctions just noted between the conclusions of the Albrecht/Nickelsburg Article, versus the bolder conclusions of the Fifth Circuit's dicta in *Needham* and *Rice*, versus the Court's ambiguous dicta in *SWANCC*. Nevertheless, those subtle differences are generally not of great importance in understanding the fundamental legal questions under discussion herein. As a practical matter, it seems fair to state that the conclusions regarding the jurisdiction of the FWPCA of 1972 and of the existing CWA made by the Albrecht/Nickelsburg Article are essentially the same as the conclusions presented by the Fifth Circuit's dicta on that subject in *Rice* and *Needham*. Consequently, for the most part this Article addresses the assertions, legal analysis, and conclusions of the Albrecht/Nickelsburg Article, and does not always cite the Fifth Circuit's dicta in *Rice* and *Needham* as well. If this Article succeeds in refuting the fundamental assertions and conclusions of the Albrecht/Nickelsburg Article, it also will have effectively refuted the conclusions of the Fifth Circuit's dicta in *Rice* and *Needham*, since the Fifth Circuit's dicta is supported by very little other than ipse dixit.

This Article first explains the practical implications of the assertion of both the Albrecht/Nickelsburg Article and the Fifth Circuit's dicta that the geographic jurisdiction of the FWPCA of 1972 was limited, and that the jurisdiction of the existing CWA is limited, essentially to the open, navigable-in-fact portions of the traditional navigable waters of the United States. Those navigable-in-fact water bodies constitute a tiny fraction of the total tributary system that flows into those navigable waters. Second, this Article demonstrates how the Albrecht/Nickelsburg Article's assertion that the FWPCA of 1972 did not assert jurisdiction (and that Article's all-but-certain conclusion that the CWA still does not have jurisdiction) over non-navigable tributaries would render the CWA completely unable to deal with the problem of water pollution that the U.S. Congress sought to address through the FWPCA of 1972 (as well as through subsequent amendments of the FWPCA). Third, this Article analyzes one by one the primary grounds offered by the Albrecht/Nickelsburg Article to support its assertion that the FWPCA of 1972 did not assert jurisdiction over non-navigable tributaries. In the process, this Article demonstrates that the Albrecht/Nickelsburg Article's alleged "legislative history" of the FWPCA of 1972 offered to justify and support that Article's conclusions is a misrepresentation of the 1972 Act and of its legislative history. Fourth, this Article demonstrates that the Corps of Engineers' final rule of April 3, 1974, which was referenced in the Court's *SWANCC* dicta, and which the Albrecht/Nickelsburg Article relied on as crucial support for its conclusions, in fact provides no meaningful support for that Article's assertions about the jurisdiction of the FWPCA of 1972 or about the CWA's current jurisdiction.[15] Finally, this Article discusses briefly the FWPCA Amendments of 1977, which further refute the conclusions of Albrecht and Nickelsburg and of the Fifth Circuit's *Needham* dicta concerning the CWA's current jurisdiction.

The Albrecht/Nickelsburg Article's Claim That the FWPCA of 1972 Did Not Assert Jurisdiction Over the Non-Navigable Tributaries to the §10 Navigable Waters Is Radically at Odds With the Generally Accepted View of the 1972 Act's Jurisdiction, and Regarding the CWA's Current Jurisdiction

The Albrecht/Nickelsburg Article Asserted That Congress Limited the Geographic Jurisdiction of the FWPCA of 1972 to the Traditional Navigable Waters of the United States Regulated Under §10 of the Rivers and Harbors Act of 1899

Based on the authors' interpretation of the *SWANCC* decision and on their interpretation of the alleged legislative history of the FWPCA of 1972, the Albrecht/Nickelsburg Article asserted the following:

> Congress intended the coverage of the CWA to . . . include: waters that were or had been navigable in fact or which could reasonably be made so; waters landward of the harbor lines; and intrastate, navigable waters that are linked to intrastate [sic; in context, Albrecht and Nickelsburg must have meant "interstate"] commerce via overland connections. Any waters beyond these "navigable waters" were to remain "waters of the State."[16]

At several other places in their Article, Albrecht and Nickelsburg clearly reiterated the assertion that Congress limited the jurisdiction of the FWPCA of 1972 to the §10 traditional navigable waters, and excluded from FWPCA jurisdiction all non-navigable tributaries of the navigable waters.[17]

Even though the Albrecht/Nickelsburg Article emphatically claims that Congress limited the jurisdiction of the FWPCA of 1972 to the §10 navigable waters, that Article also concedes that CWA jurisdiction also now exists over wetlands that "immediately adjoin a navigable water and have a regular surface hydrological connection to that water."[18] That latter concession is not consistent with the alleged congressional intent regarding the jurisdiction of the FWPCA of 1972 quoted above, but is a necessary conces-

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[14] *See id.* at 11056.

[15] U.S. Army Corps of Engineers, Permits for Activities in Navigable Waters or Ocean Waters, 39 Fed. Reg. 12115 (Apr. 3, 1974).

[16] *See* Albrecht & Nickelsburg, *supra* note 1, at 11055.

[17] *See id.* at 11054: "In other words, the Corps' original definition [of CWA jurisdiction in the Corps' 1974 final rule] captured the intent of the statute: to protect the navigable waters as traditionally defined." *See also id.* at 11055: "The Corps' 1974 regulation, which were limited to the traditional navigable waters, properly captured Congress' intent in regulating the 'navigable waters' in 1972."

[18] *Id.* at 11058.

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sion, because it reflects the Albrecht/Nickelsburg Article's narrow interpretation of the Court's holding in *United States v. Riverside Bayview Homes, Inc.*[19] The Albrecht/Nickelsburg Article attempts to rationalize the inconsistency between the alleged intent of Congress regarding the jurisdiction of the FWPCA of 1972 versus the outcome of the *Riverside Bayview Homes* decision as follows. According to Albrecht and Nickelsburg, the Corps and EPA rulemakings of 1975, 1977, etc., that asserted jurisdiction over wetlands adjacent to §10 navigable waters were all illegal, i.e., not authorized by law, because those regulations were contrary to the intent of Congress clearly expressed in the FWPCA of 1972 to restrict CWA jurisdiction to navigable-in-fact §10 navigable waters. Nevertheless, those illegal agency rulemakings were partially ratified by Congress in the FWPCA Amendments of 1977 and, thus, were subsequently upheld in part by the Court's *Riverside Bayview Homes* decision, *but only regarding CWA jurisdiction over wetlands actually adjoining open water areas of navigable-in-fact §10 navigable waters.* Because allegedly the FWPCA of 1972 did not assert jurisdiction over non-navigable tributaries, and because the FWPCA Amendments of 1977 did not explicitly and clearly assert CWA jurisdiction over non-navigable tributaries, Albrecht and Nickelsburg assert that the CWA has never had jurisdiction (and almost certainly does not currently have jurisdiction) over any non-navigable tributary or over any wetlands adjacent to non-navigable tributaries. The Albrecht/Nickelsburg Article does leave open the theoretical possibility that in the future some unknown legal scholar might discover a hitherto unnoticed clear and explicit provision in the FWPCA Amendments of 1977 that would demonstrate that Congress actually did assert CWA jurisdiction over non-navigable tributaries in the FWPCA Amendments of 1977. However, the Albrecht/Nickelsburg Article strongly implies that such a discovery is so unlikely as to be virtually impossible. Thus, according to Albrecht and Nickelsburg, we can be all but certain that the CWA's existing jurisdiction does not extend to any non-navigable tributary or to any wetlands adjacent to any non-navigable tributary.[20] Of course, the Fifth Circuit's dicta in *Rice* and *Needham* is fully consistent with that conclusion.

For the benefit of readers who may not be familiar with this area of the law, a brief explanation of the Albrecht/Nickelsburg Article's assertions regarding CWA jurisdiction and some definition of terms may be necessary. Remarkably, the Albrecht/Nickelsburg Article alleged that the total geographic reach of the FWPCA of 1972, and of the current CWA, is limited to only a portion of the traditional "navigable waters of the United States" and to some of their adjacent wetlands. The expression "traditional navigable waters of the United States" is a legal term of art further defined below; that term is used synonymously with the expression, "the §10 navigable waters." In general terms, according to the Albrecht/Nickelsburg Article, the FWPCA of 1972 had, and the existing CWA almost certainly has, jurisdiction over only that portion of the traditional navigable waters of the United States that is "navigable-in-fact," i.e., currently capable of supporting commercial navigation, such as barge traffic, plus a few modest additions to those traditional navigable waters. The additions to navigable-in-fact waterways recognized in the Albrecht/Nickelsburg Article as also subject to *CWA* jurisdiction are: (1) waterways that historically carried commercial navigation but that no longer do so because those waterways are no longer navigable-in-fact; (2) a few large, navigable-in-fact, intrastate lakes such as the Great Salt Lake in Utah; and (3) wetlands immediately adjoining open water areas of the traditional navigable waters and having a regular surface connection to those navigable waters. *Excluded* from the Albrecht/Nickelsburg conception of the jurisdiction of both the FWPCA of 1972 and of the current CWA are the vast majority of rivers, creeks, streams, lakes, ponds, impoundments, sloughs, swamps, and so on that constitute the total tributary system that feeds into and supplies the fresh water in the limited "traditional navigable waters of the United States." The Albrecht/Nickelsburg Article clearly stated that the FWPCA of 1972, and almost certainly the existing CWA, have never had jurisdiction over non-navigable tributaries or their adjacent wetlands.[21]

The term "the navigable waters of the United States" is a legal term of art that has been defined over the years by numerous decisions of the Court and the federal circuit courts, as those courts have defined what water bodies are subject to certain federal statutory authorities, and also, of course, subject to federal authority under the U.S. Constitution. After 1972, federal courts and legal commentators began to call "the navigable waters of the United States" the "*traditional* navigable waters of the United States" to clearly distinguish that term from the much more extensive geographic jurisdiction of the FWPCA of 1972, the first version of the CWA. The FWPCA of 1972 also asserted jurisdiction over "navigable waters," but gave that term a new and much broader definition as "the waters of the United States, including the territorial seas."[22]

The federal courts have determined that the traditional navigable waters of the United States, speaking generally, constitute the geographic jurisdiction of two important federal regulatory statutes, §§9 and 10 of the R&H Act of 1899.[23] Section 9 of the R&H Act of 1899 requires federal approval of all dams, dikes, bridges, and causeways that would span a navigable waterway and potentially block navigation. Section 10 of the R&H Act of 1899 requires a permit from the Corps for any other type of structure or work in the navigable waters. Because the Corps' long-established regulatory program under §10 of the R&H Act of 1899 has been determined by many federal courts as extending throughout, but no further than, the traditional navigable waters of the United States, this Article will refer to that limited set of traditional navigable waters of the United States as "§10 navigable waters."

Generally speaking, the §10 navigable waters are subject to the federal navigation servitude, which ensures the right of the federal government to develop, alter, and protect all navigable waters of the United States to enhance navigation, without having to pay compensation under the Fifth Amendment to the Constitution.[24] As a general matter, the

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[19] 474 U.S. 121, 16 ELR 20086 (1985).

[20] *See* Albrecht & Nickelsburg, *supra* note 1, generally, and specifically at 11054-56.

[21] *See id.* at 11057: "If, as the Supreme Court stated in *SWANCC*, Congress in 1972 intended to regulate only the navigable waters, then the original CWA did not include non-navigable tributaries."

[22] *See* 33 U.S.C. §502(7).

[23] *Id.* §§401, 403.

[24] *See, e.g.*, United States v. Rands, 389 U.S. 121 (1967); United States v. Cherokee Nation of Okla., 107 S. Ct. 1487 (1987).

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public also has a right to navigate freely on all §10 navigable waters.[25] The navigable waters of the United States include all areas (including wetlands) below the mean high tide line for tidal water bodies and below the ordinary high watermark for nontidal water bodies.[26] Based on this body of federal court decisions, for many years the Corps (the primary federal agency authorized by Congress to protect and develop the navigable waterways) has defined by regulation the extent of federal government jurisdiction over the traditional "navigable waters of the United States," i.e., the §10 navigable waters, as follows:

> General Definition. Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity.[27]

The Albrecht/Nickelsburg Article introduces some confusion regarding the geographic extent of the traditional navigable waters of the United States, i.e., the jurisdiction of §§9 and 10 of the R&H Act of 1899, and thus of the CWA as well, when that Article at least twice indicates that a water body is not subject to any of those federal statutes' jurisdiction merely because that water body is subject to the ebb and flow of the tide.[28] Apparently the Albrecht/Nickelsburg Article identifies as traditional navigable waters of the United States only those portions of tidal waters that are actually navigable-in-fact, and would exclude from R&H Act of 1899 jurisdiction all tidal water bodies and their adjacent tidal wetlands that are not actually navigable by commercial vessels but that nonetheless lie below the mean high tide line. Thus, the Albrecht/Nickelsburg Article apparently would exclude from the definition of the traditional waters of the United States, and perhaps from CWA jurisdiction as well, vast areas of tidal marshes, mud flats, shallow waters, etc., that lie below the mean high tide line but that are not navigable in fact, i.e., cannot actually support commercial navigation.[29] The Albrecht/Nickelsburg Article is wrong on that point, as demonstrated by court decisions such as *United States v. Stoeco Homes, Inc.*,[30] but that is a relatively minor error presented by the Albrecht/Nickelsburg Article. For purposes of this discussion, the important assertion of the Albrecht/Nickelsburg Article is that the FWPCA of 1972 never had, and thus that the current CWA almost certainly does not have, jurisdiction over any of the non-navigable tributaries of the §10 navigable waters, or over any wetlands adjacent to those non-navigable tributaries.

The Attempt of the Albrecht/Nickelsburg Article (and of the Fifth Circuit's Needham *Dicta) to Read Out of the Jurisdiction of the FWPCA of 1972, and of the Current CWA, All Non-Navigable Tributaries Would Effectively Nullify Those Important Federal Statutes*

As is generally understood, ever since enactment of the FWPCA of 1972, EPA, other federal agencies, and the vast majority of the federal courts have defined the geographic jurisdiction of that statute, and of the CWA as subsequently amended in 1977 and 1987, much more broadly than the limited geographic jurisdiction of the traditional navigable waters of the United States, i.e., the "§10 navigable waters." (Note: there was one short-lived exception to that generalization, the Corps of Engineers' final rule of April 3, 1974, which was overturned as contrary to law on March 27, 1975; that rule is discussed at length below.) From 1972 to the present, federal CWA jurisdiction has included not only the entirety of the §10 navigable waters of the United States, but also all interstate water bodies, intrastate, isolated but navigable water bodies (such as the Great Salt Lake), and, most importantly for this discussion, all non-navigable tributaries that flow into any of the water bodies listed above and all wetlands adjacent to any of those water bodies or tributaries.[31]

Of course, there is a remarkable contrast between the limited geographic reach of the FWPCA of 1972, and of the existing CWA, as construed by the Albrecht/Nickelsburg Article, compared with the vastly more extensive geographic reach of the CWA as construed to date by all federal agencies and the majority of the federal courts. If the Albrecht/Nickelsburg Article were correct in asserting that the FWPCA of 1972 had, and the current CWA almost certainly has, jurisdiction only over the §10 navigable waters, plus the few modest additions noted above, that highly restricted area would constitute only a tiny fraction of the total tributary system that constitutes all of the "waters of the United States" as that concept has been understood by EPA, other federal agencies, and the federal courts since 1972 (prior to the new revelations of the Albrecht/Nickelsburg Article, that is). The question of just how small that fraction would be cannot be answered with absolute precision and calls for some professional judgment. To arrive at a rough estimate, I consulted with several professional experts now working for the Corps whose job it is to implement both the CWA and the R&H Act of 1899, and with EPA experts who implement the CWA. Based on those consultations, my best estimate is

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[25] *But see* Kaiser Aetna v. United States, 444 U.S. 164, 10 ELR 20042 (1979).

[26] *See generally* 33 C.F.R. pt. 329.

[27] *Id.* §329.4. The Albrecht/Nickelsburg Article cites many of the important federal court decisions that have defined the "traditional navigable waters of the United States," so those citations will not be repeated here. *See* Albrecht & Nickelsburg, *supra* note 1, at 11043-44. Note that the general definition of the navigable waters of the United States from the Corps' regulations does not incorporate the "second test of *The Daniel Ball* case" as a prerequisite for a water body to qualify as a navigable water of the United States. That fine point is primarily relevant regarding the jurisdiction of §§9 and 10 of the Rivers and Harbors Act of 1899 over certain land-locked, intrastate, navigable-in-fact lakes such as the Great Salt Lake in Utah. That subject is discussed further below.

[28] *See* the Albrecht & Nickelsburg summary of CWA jurisdiction, Albrecht & Nickelsburg, *supra* note 1, at 11055, and their definition of the "traditional navigable waters," *id.* at 11044. Both of those statements exclude "waters subject to the ebb and flow of the tide" as a separate, independent category of the traditional navigable waters. Nevertheless, in at least two other places in their Article, they seem to suggest that tidal waters might possibly be a separate category of the traditional navigable waters after all, and thus might be subject to jurisdiction under at least §10 of the Rivers and Harbors Act, even if not under the CWA. *See id.* at 11047, 11050.

[29] Of course, the Albrecht/Nickelsburg Article presumably would recognize CWA jurisdiction over some tidal wetland areas if those wetlands actually abut open water areas of navigable-in-fact §10 navigable waters, since that is the Albrecht/Nickelsburg interpretation of the limited holding of the Court in *United States v. Riverside Bayview Homes*, 474 U.S. 121, 16 ELR 20086 (1985).

[30] 498 F.2d 597, 4 ELR 20390 (3d Cir. 1974).

[31] *See* 33 C.F.R. pt. 328 and specifically *id.* §328.3(a).

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that the total length of the rivers, streams, and other water bodies that would constitute the total geographic jurisdiction of the FWPCA of 1972, and of the existing CWA, under the Albrecht/Nickelsburg Article's assertions would amount to less than 1% of the area over which EPA and the Corps now assert CWA jurisdiction, i.e., in 2004.[32] Of course, prior to the substantial reduction of CWA jurisdiction caused by the Court's *SWANCC* decision in 2001, that small fraction would have been even smaller. This remarkable result is explained by the fact that the total length of the §10 navigable waters is quite small in comparison to the very large length of the huge number of non-navigable rivers, creeks, streams, impoundments, lakes, bayous, ponds, sloughs, swamps, marshes, etc., that constitute the total aquatic tributary system that feeds into the navigable waters and supplies them with fresh water. That contrast is one indication of the radical nature of the Albrecht/Nickelsburg Article's assertions that in itself should make any reader view that Article's assertions with some degree of skepticism.

A second reason why the Albrecht/Nickelsburg Article and the Fifth Circuit's *Needham* dicta cannot possibly be correct is based on the notion that if someone proposes a revolutionary new interpretation of an important federal statute's jurisdiction, which interpretation would render that statute *totally ineffective*, that new interpretation is probably wrong.

The Albrecht/Nickelsburg Article's (and Fifth Circuit's *Needham* Dicta's) Assertions Regarding the Jurisdiction of the FWPCA of 1972, and of the Existing CWA, Would Mean That No Provision of Either of Those Statutes Could Possibly Deal Effectively With Water Pollution

The Assertion of the Albrecht/Nickelsburg Article (and of the Fifth Circuit's Needham *Dicta) That the FWPCA of 1972 Had, and the Existing CWA Almost Certainly Has, No Jurisdiction Over Any of the Non-Navigable Tributaries That Flow Into the §10 Navigable Waters Would Eliminate the Jurisdiction of Every CWA Provision Over Those Tributaries, Not Just CWA §404*

The Albrecht/Nickelsburg Article misrepresents the potential significance of the extraordinarily restricted CWA jurisdiction that their Article asserts is legally mandated by their interpretation of the *SWANCC* decision and their interpretation of the CWA's legislative history. The Albrecht/Nickelsburg Article consistently addresses the jurisdiction of the CWA as a whole, but it nonetheless discusses the implications of its conclusions only for the Corps' regulation of wetlands and other waters of the United States under CWA §404. The Albrecht/Nickelsburg Article remains curiously silent about how its conclusions would affect the other provisions of the CWA or the many forms of water pollution that the CWA has addressed since 1972 and currently addresses.[33]

Because the Albrecht/Nickelsburg Article would appear at first glance to address only CWA §404 jurisdiction over wetlands, any reader of that Article could easily be misled regarding the significance of the Article's far-reaching assertions regarding the jurisdiction of the FWPCA of 1972 and of the existing CWA. It is true that vast amounts of ecologically valuable wetlands adjacent to the innumerable non-navigable tributaries to the traditional navigable waters (and adjacent to tidal waters that are not navigable in fact) would lie beyond CWA jurisdiction if the Albrecht/Nickelsburg Article's allegations were correct. It is also true that the unregulated and uncontrolled destruction of those wetlands would adversely affect water quality and flood control for the navigable and interstate water bodies lying downstream and would destroy valuable fish and wildlife habitat, etc. However, the most disturbing, but unstated, implications of the Albrecht/Nickelsburg Article do not relate to wetlands or CWA §404, but to all the numerous aspects of water pollution addressed by the many other provisions of the CWA.

Essential Background Information on the CWA

For the benefit of readers who may know very little about the CWA, it is important to understand that the CWA was enacted as the FWPCA of 1972 to provide a comprehensive, national, interstate solution for a perceived national crisis concerning water pollution. Some background information regarding the CWA is especially important so that a reader can "see through" the fallacious arguments presented in the Albrecht/Nickelsburg Article, suggesting that the United States has never really had, and has never really needed, an effective federal CWA, because, allegedly, state, local, and "voluntary" efforts will suffice to control water pollution, just as in the good old days before enactment of the FWPCA of 1972.[34]

Prior to 1972 the United States had relied on an ineffective assortment of state, local, and federal statutes, plus common-law "nuisance" remedies, to deal with the interstate problem of water pollution. As a result, by 1972 most of the nations's important waterways were either already polluted to a dangerous degree or were rapidly becoming so. For example, in 1972 Lake Erie presented a well-known example of an interstate water body that was so fouled by industrial and sewer discharges that it could no longer support a healthy population of fish or other aquatic life and was regarded as dangerous for human uses, such as swimming. The Cuyahoga River in Cleveland, Ohio, was so polluted by

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[32] To cite one example, the statistics for the Missouri River and its tributaries are as follows: according to experts in the Corps of Engineers Northwest Division, the total length of the traditional navigable waters of the United States, i.e., §10 navigable waterways, for the Missouri River and tributaries watershed is 3,151 miles. According to those same experts, a conservative estimate of the total length of the §10 waters plus all of the tributaries to those §10 waters would be greater than 559,669 miles. Thus, for the Missouri River and tributaries, the total length of the §10 waters would be less than 1% (.56297%) of the total length of the full tributary system of the Missouri River and tributaries.

[33] To cite merely one example, the Albrecht/Nickelsburg Article states that even though the Article has revealed that many of the *wetlands* previously believed to be subject to regulation by the Corps under CWA §404 are now beyond CWA jurisdiction, those wetlands can still be protected, because: "The federal government has non-regulatory programs that create incentives to conserve or restore wetlands, and private groups commonly buy or preserve wetlands. Many states have their own wetland programs, and many who had left them dormant have expanded them after *SWANCC*." Albrecht & Nickelsburg, *supra* note 1, at 11058. In contrast, the Article is remarkably silent regarding the vast reaches of non-wetland water bodies that would be stripped of CWA protection by their assertions about CWA jurisdiction, and regarding potential pollution of those waters and of the navigable waters located downstream.

[34] *See id.*

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petroleum and other chemical wastes that on at least one well-publicized occasion the river itself caught fire. The Potomac River in the vicinity of Washington, D.C., was commonly regarded as a smelly, open sewer in which few fish could survive and in which no sensible person would swim.

One reason why the state and local governments had proven themselves both incapable of and unwilling to control water pollution in the years before the FWPCA of 1972 was the "transboundary" nature of the water pollution problem, caused by the fact that multiple states and local governments shared the same river, lake, bay, etc. Thus, for example, no "downstream" state or community could benefit substantially from local efforts to control water pollution so long as upstream states and communities continued to send their uncontrolled, polluting wastes downstream. Instead, most states engaged in a "race to the bottom," refusing to spend local tax dollars on pollution abatement, or to jeopardize current or potential industrial development, by enacting effective state or local measures to control water pollution. State or local adoption of such expensive pollution control measures would cause polluting industries to move to lower cost states that did not regulate water pollution. Moreover, many of the "clean water" benefits that would be derived from state or local efforts to control water pollution would be enjoyed not by local residents who would bear the costs, but instead by the residents of other states or communities that shared the same water body, especially by those living "downstream." Meanwhile, any state with strong pollution control regulation would lose industry to competing states and still suffer from water pollution coming from other, e.g., "upstream," states.

Consequently, in 1972 Congress responded to the perceived national water pollution crisis by enacting the FWPCA of 1972, the first effective federal CWA. FWPCA §301 declared that "the discharge of any pollutant by any person shall be unlawful" unless such a discharge had been authorized under one of the various regulatory programs that the FWPCA created.[35] Among the regulatory programs created by the FWPCA of 1972 to control water pollution was CWA §402, through which EPA and the states that would later assume responsibility for administering that program would bring under control virtually every kind of polluting industrial and sewer discharge into any of "the waters of the United States."[36] The new FWPCA also included many other important provisions, addressing such issues as enforcement,[37] citizens lawsuits,[38] etc.

Of course, ever since the FWPCA's enactment, legal practitioners, federal agencies, and the federal courts have been dealing with difficult questions about what classes of aquatic areas are subject to the geographic jurisdiction of the federal CWA and what types of aquatic areas are beyond federal jurisdiction and reserved for regulation by the state governments. For purposes of this "nutshell" summary of the CWA, it may suffice to say that, after the Court's *SWANCC* decision but prior to the revolutionary revelations of the Albrecht/Nickelsburg Article, it was generally believed that the federal CWA had jurisdiction at a minimum over the full tributary system of the §10 navigable waters, so that the CWA could protect those waters from every kind of pollution. However, after the *SWANCC* decision, it has been widely believed that the CWA generally does not have jurisdiction over truly "isolated," intrastate, non-navigable water bodies, such as vernal pools or playa lakes that have no discernible "hydrologic connection" to the tributary system of the §10 navigable waters.

Every Provision of the CWA Shares the Same Geographic Jurisdiction

Ever since enactment of the FWPCA of 1972, the jurisdictional scope of the entire CWA, and for every section thereof, has been defined by the same CWA term, "navigable waters," which is defined in the statute to mean "the waters of the United States, including the territorial seas."[39] Because every provision of the CWA since 1972 has always relied for its geographic jurisdiction on precisely the same statutory term, "the waters of the United States," the jurisdictional boundaries of the CWA are, and have always been, the same for every provision in the Act. Consequently, the assertion of the Albrecht/Nickelsburg Article that more than 99% of the total tributary system of the §10 navigable waters were not subject to the jurisdiction of the FWPCA of 1972, and almost certainly are not subject to the existing CWA, would effectively nullify all of the vital CWA provisions that have effectively protected our nation's waters from pollution since 1972.

As described below, the federal government has defined the term "the waters of the United States" in regulations, and the regulatory definitions for that term governing the various provisions and programs of the CWA are identical, as mandated by the common statutory definition of the same term.[40] Consequently, the Albrecht/Nickelsburg Article's assertion that the FWPCA of 1972's jurisdiction did not, and the existing CWA's jurisdiction almost certainly does not, include any of the non-navigable tributary streams that flow into traditional navigable waters would take away from all of those tributaries the protections of every CWA provision, including, for example, the all-important CWA §§301 and 309; the CWA §402 permit program, which covers all polluting discharges other than dredged or fill material; all CWA provisions relating to water quality standards, oil pollution prevention and cleanup, toxic effluent standards and prohibitions, e.g., CWA §307, etc.; as well as the permit program for discharges of dredged or fill material (CWA §404). As will be demonstrated below, such a result would have rendered any effort to control water pollution through the FWPCA of 1972, or under the existing CWA, impossible. It is hard to imagine that Congress intended such a nonsensical result from its landmark clean water legislation enacted as the FWPCA of 1972, and from the FWPCA as subsequently amended.

The Albrecht/Nickelsburg Article does not state or even suggest that the geographic reach of the various provisions of the CWA vary, or could vary, from one CWA section to another. But what other notion could possibly explain those authors' studied silence regarding the implications of their assertions regarding the jurisdiction of the FWPCA of 1972, and of the existing CWA, for all aspects of water pol-

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[35] *See* 33 U.S.C. §1311.

[36] *See id.* §1342.

[37] *See id.* §1319.

[38] *See id.* §1365.

[39] *Id.* §1362(7).

[40] *See, e.g.*, 33 C.F.R. §328.3(a).

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lution? In any event, there is no legitimate basis for asserting that the geographic jurisdiction of CWA §404 is different in any way from the jurisdictional reach of all other sections of the CWA under federal statutes and regulations as they exist now.

The executive branch agencies (through rulemakings) and the federal courts (through their decisions) have been construing the geographic jurisdiction of the CWA and the various sections thereof for more than 30 years. During all of that time there has been near unanimity that the entire CWA has one, unified geographic jurisdiction, based on one statutory definition of "the waters of the United States."[41] The Albrecht/Nickelsburg Article cited no federal court decision or other legal authority to the contrary.

Moreover, the well-known opinion of then-Attorney General Benjamin R. Civiletti, dated September 5, 1979, stated the following:

> The term "navigable waters" . . . is a linchpin of the Act . . . , critical not only to the coverage of [§]404, but also to the coverage of the other pollution control mechanisms established under the Act, including the [§]402 permit program for point source discharges, the regulation of discharges of oil and hazardous substances in [§]311 . . . and the regulation of discharges of vessel sewage in [§]312 . . . . Its definition is not specific to [§]404, but is included among the Act's general provisions. It is, therefore, logical to conclude that Congress intended that there be only a single judgment as to whether—and to what extent—any particular water body comes within the jurisdictional reach of the federal government's pollution control authority. We find no support either in the statute or its legislative history for a conclusion that a water body would have one set of boundaries for purposes of dredged or fill permits under [§]404 and a different set for purposes of the other pollution control measures in the Act. On this point I believe there can be no serious disagreement.[42]

It is significant that since enactment of the FWPCA of 1972, the federal courts have agreed with the Civiletti opinion's conclusion that the CWA has one, unitary geographic jurisdiction, identical in scope and extent for all CWA sections and programs; all federal agencies have accepted the conclusions of the Civiletti opinion since it was signed in 1979, and have reflected that fact in their regulations.[43] Consequently, when the Albrecht/Nickelsburg Article asserted that the FWPCA of 1972 excluded, and that the existing CWA almost certainly excludes, all non-navigable tributaries of the §10 navigable waters from their jurisdiction, that assertion would deprive all of those tributaries of the protection from pollution provided by every important section of the CWA, not merely CWA §404.

As explained above, my estimate is that the total length of the rivers, streams, and other water bodies that would constitute the geographic jurisdiction of the FWPCA of 1972, and of the existing CWA, under the Albrecht/Nickelsburg Article's assertions would amount to less than 1% of the water bodies over which EPA and the Corps now assert CWA jurisdiction. However, with regard to controlling water pollution, it hardly matters at all whether the Albrecht/Nickelsburg Article's assertions about CWA jurisdiction would strip 99%, 90%, 50%, or 30% of the total tributary system of the traditional navigable waters from the jurisdiction of the CWA because the resulting effect on water pollution in the United States, and the ability of government and citizens to control pollution, would be catastrophic in any event.

The CWA Would Be Completely Ineffectual if Non-Navigable Tributaries Were Not Covered Under Its Protection, as the Albrecht/Nickelsburg Article and the Fifth Circuit's Needham *Dicta Have Alleged*

It is significant that, ever since implementation of the FWPCA of 1972, and at present, a very large number of the CWA §402 permits for major industrial dischargers of water pollutants cover industrial discharges into non-navigable tributaries of the navigable waters.[44] If, as the Albrecht/Nickelsburg Article asserts, all of the non-navigable tributaries that flow into the §10 navigable waters were excluded from the jurisdiction of the FWPCA of 1972, and almost certainly from the jurisdiction of the existing CWA as well, then those industrial discharges would not need CWA §402 permits controlling their potentially harmful pollutants and requiring them to reduce and treat their wastes before discharging them into the tributary streams. If the FWPCA did not and does not have jurisdiction over non-navigable tributaries, then the numerous industrial facilities holding CWA §402 permits could dump their untreated chemical and industrial wastes into the tributary streams at will, just as they did before enactment of the FWPCA of 1972, regardless of the effects on people and the environment downstream.

In addition, any person, business, or industry that has chemical wastes or other pollutants to dispose of could (and presumably some of them would) send their tanker trucks loaded with those toxic chemicals to some tributary river or stream, anywhere upstream of the head of navigation,[45] i.e., the upstream end or limit of CWA jurisdiction, according to the Albrecht/Nickelsburg Article, where those untreated, and potentially highly toxic, chemical wastes could be dumped into the river and thereby disposed of cheaply, efficiently, and free of any CWA restrictions or penalties.

Moreover, any corporation with wastes to dispose of would have a very strong incentive to locate, or relocate, its factories (or at least all waste-disposal operations) upstream

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[41] 33 U.S.C. §1362(7).

[42] 43 Op. Att'y Gen. No. 15, at 5 (Sept. 5, 1979).

[43] During the first Reagan Administration, the U.S. Department of Justice (DOJ) conducted an informal review of the 1979 "Civiletti opinion," at the request of the U.S. Department of the Army (Army), to determine whether the opinion should be reconsidered. After conducting the review, the Reagan Administration's Assistant Attorney General, Office of Legal Counsel, Theodore Olson (now Solicitor General of the United States), determined that the Civiletti opinion was correct and that it would not be reconsidered or reversed by the DOJ. The author was personally involved in presenting to Olson the Army's request for a review of the Civiletti opinion, and the author was present to hear Olson's final response to the Army following the DOJ's review of that Attorney General's opinion.

[44] That fact is clearly revealed by the record amassed by EPA and the Corps in response to the "Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of 'Waters of the United States,'" published in the *Federal Register*, 68 Fed. Reg. 1991 (Jan. 15, 2003). In fact, according to the National Hydrography Data Set of the U.S. Geological Survey, approximately 27% of the §402 permits for major industrial dischargers are for discharges into intermittent or ephemeral streams, the two smallest, most "upstream" categories of the innumerable non-navigable tributaries.

[45] The "head of navigation" is a legal term of art referring to the place on a navigable river upstream of which commercial navigation is no longer feasible, usually because of rapids, waterfalls, shallow water, rocks, or other impediments to commercial navigation.

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of the head of navigation, where all that corporation's wastes could be dumped into the river, untreated, very inexpensively, and perfectly legally,[46] if the Albrecht/Nickelsburg Article's assertions about CWA jurisdiction were correct. For any industry or company that might not be inclined to behave so irresponsibly, competitive, cost-cutting pressures from competing firms would soon force them to follow the lead of the industry's most ruthless cost-cutters and to dump their wastes untreated into the tributary steams as well. Of course, within hours or days of the dumping, those chemical wastes would be carried downstream from the tributaries into the traditional navigable waters of the United States. The people of the United States take their drinking water from both navigable and non-navigable parts of the total tributary system, but in either case the chemical wastes that would be dumped into non-navigable tributaries free of CWA restrictions would become part of our drinking water supplies, as well as part of the flesh of the fish and shellfish that we eat, and part of our ecosystem in general. It is very curious that both the Albrecht/Nickelsburg Article and the Fifth Circuit's *Needham* opinion seem oblivious to the environmental and public health problems that they seem to legitimize, or arguably invite, by their assertion that the FWPCA of 1972 never did have, and the existing CWA almost certainly does not have, jurisdiction over the non-navigable tributaries of the §10 navigable waters.

If there is any person who believes that industries, corporations, and individuals with chemical wastes to dispose of will always (or even usually) be exemplary citizens on a purely voluntary basis and would not dump their untreated, toxic wastes into the nation's waters if they no longer have to be concerned about the CWA's restrictions and penalties, that person need merely review the history of water pollution in America before the FWPCA of 1972 became law. In fact, the enforcement history of the CWA has demonstrated every year since 1972 that quite a few polluters will try to get away with illegal dumping and discharging of pollutants of all types despite the stringent civil and criminal penalties that the CWA has imposed since 1972 on those dumpers who are apprehended. If the Albrecht/Nickelsburg and *Needham* dicta assertions restricting CWA jurisdiction to the §10 navigable waters were to prevail, then the number of polluters dumping their wastes into our waterways would surely increase, since they could dump into any non-navigable tributary free of any CWA restriction or penalty.

To cite merely one of numerous possible examples from the recent past, consider *United States v. Eidson*.[47] In that CWA enforcement case, the federal government used the CWA to impose severe penalties for water pollution on Eidson, whose business was to clean out underground gasoline tanks for service stations. Eidson quite naturally determined that the cheapest and most convenient way to empty his large tanker truck full of poisonous petroleum wastes and solvents was to dump those untreated wastes, secretly and late at night, into small, non-navigable tributaries that eventually flowed into Tampa Bay, Florida, where those toxic wastes caused a substantial fish kill. Although Eidson was apprehended and punished under the CWA, if the federal courts were to adopt the Albrecht/Nickelsburg Article's reading of CWA jurisdiction, then all of our nation's waters could be fouled by many thousands of polluters like Eidson, all doing what the unregulated, competitive system would impose as the least-cost, perfectly legal method for every business and industry to dispose of its wastes.[48]

The Conclusions of the Albrecht/Nickelsburg Article and of the Fifth Circuit's Needham *Dicta Defy Common Sense: Why Would Congress Enact a "Federal Water Pollution Control Act" Statute in 1972 With Such a Limited Geographic Jurisdiction That It Could Not Begin to Address the Serious Water Pollution Problems That the Act Purported to Address?*

It seems highly unlikely that Congress enacted the FWPCA of 1972 merely to create a nullity, an elaborate statutory fraud that could not possibly deal with the serious problem of water pollution that Congress purported to address. It seems equally unlikely that Congress kept in place that same statutory fraud of a CWA having only a tiny fraction of the geographic jurisdiction necessary to deal with the problem of water pollution when Congress revisited the question of the CWA's geographic jurisdiction in the FWPCA Amendments of 1977. Nevertheless, because the Albrecht/Nickelsburg Article asserts that the FWPCA of 1972 definitely excluded from its jurisdiction all non-navigable tributaries, and because that Article also asserts that the CWA of today almost certainly still has no jurisdiction over non-navigable tributaries, that Article did offer us all some palliative consolations. For example, Albrecht and Nickelsburg suggest that governments and private groups can offer incentives to reward people and corporations when they voluntarily choose not to discharge pollutants, even though they would have every legal right under the CWA to discharge pollutants into non-navigable tributaries free of any regulation or penalty.[49] By offering us this palliative, Albrecht and Nickelsburg implicitly admit that their assertions about the CWA's truncated jurisdiction would render that statute no longer capable of dealing effectively with water pollution. It

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[46] At least discharges of pollutants into non-navigable tributaries would be fully legal under federal law if the assertions of the Albrecht/Nickelsburg Article were correct. Of course, in theory such discharges could still be illegal under state or local law, but most states now rely on the FWPCA and on state programs assumed under that statute, so if federal CWA jurisdiction is lost, state jurisdiction would be lost as well. Many states have weak, nonexistent, or minimally enforced state and local laws governing water pollution, so the loss of CWA jurisdiction would render effective control of water pollution practically impossible, at least for many years.

[47] 108 F.3d 1336, 27 ELR 20853 (11th Cir. 1997).

[48] In fact, if potential polluters or their legal advisors were to read and agree with the conclusions of the Albrecht/Nickelsburg Article (or the dicta in the Fifth Circuit's *Needham* decision), then those polluters could start to dump their pollutants into any non-navigable tributary at once. Those polluters could rely on the notion that, if they were ever apprehended and prosecuted, the federal courts would later agree with the Albrecht/Nickelsburg Article and the *Needham* dicta, and conclude that their dumping had not violated the CWA, since the CWA allegedly does not protect non-navigable tributaries.

[49] *See* Albrecht & Nickelsburg, *supra* note 1, at 11058. Under the Albrecht/Nickelsburg Article's view of CWA jurisdiction and the proposed use of voluntary incentives to discourage the discharge of pollutants, any potential polluter like Eidson with a tanker truck full of toxic chemical wastes could hold hostage an entire watershed, as well as all persons living downstream, by saying: "If you will pay me $5 million, I will refrain from dumping my toxic chemicals into this river just upstream of the head of navigation. Otherwise, get ready to ingest these chemicals in your tap water tomorrow or next week." While such payments to polluters could be described as a "voluntary incentive" not to pollute, the entire transaction could also be described as extortion.

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seems highly unlikely, however, that voluntary incentives not to pollute would prove very effective, and they could prove to be extraordinarily expensive.

Of course, the fact that the Albrecht/Nickelsburg Article and the Fifth Circuit's *Needham* dicta reached and presented conclusions regarding the past and current jurisdiction of the CWA that, if taken seriously and adopted by the federal courts and acted on by potential polluters, could lead to a major disaster for public health and environmental quality, does not necessarily demonstrate that the analysis and conclusions of the Albrecht/Nickelsburg Article and the *Needham* dicta are wrong as a matter of law. In fact, Albrecht and Nickelsburg seemed to anticipate this possible criticism of the environmental consequences of their position and responded to it in advance by suggesting that the remedial purposes of the CWA were all very fine in theory, but those purposes simply could not be achieved by a statute that, according to their analysis, has such a limited jurisdiction.[50] We will now examine their legal analysis.

The Albrecht/Nickelsburg Article Arrived at an Incorrect Interpretation of the Jurisdiction of the FWPCA of 1972 Because That Article Relies on Several Fallacies

The Albrecht/Nickelsburg Article's Conclusions Are Based on an Erroneous Analysis of the Legislative History of the FWPCA of 1972

The first and primary justification that the Albrecht/Nickelsburg Article offered to support its extraordinary conclusions about the CWA's geographic jurisdiction is based on a highly innovative use of what Albrecht and Nickelsburg purport to be a vital part of the legislative history of the FWPCA of 1972. The Albrecht/Nickelsburg Article's use of "legislative history" materials demonstrates why one must always be very careful, and somewhat skeptical, in accepting legal conclusions that an advocate alleges to be supported by legislative history, since legislative history analysis is inherently selective and can be easily manipulated. However, the Albrecht/Nickelsburg Article is especially remarkable because its fundamental legal conclusions regarding the FWPCA of 1972 are based on congressional hearings and reports that hitherto were not regarded as being part of the legislative history of the FWPCA of 1972 at all, and for a very good reason: the hearings and reports presented as "legislative history" of the FWPCA of 1972 by Albrecht and Nickelsburg really had nothing whatever to do with that statute.[51]

Boiled down to its essence, the Albrecht/Nickelsburg Article asserted that when Congress enacted the FWPCA of 1972, it was trying primarily to overturn a few administrative restrictions that the Corps had previously imposed on the geographic jurisdictional reach of §10 of the Rivers and Harbors Act of 1899, and, thus, Congress limited the jurisdiction of the FWPCA of 1972 to only §10 navigable waters. To say the least, that is a misrepresentation of the legislative history of the FWPCA of 1972.

According to the Albrecht/Nickelsburg Article, Congress did not intend to extend the geographic jurisdiction of the FWPCA of 1972 beyond the §10 navigable waters because Congress was simply trying to correct administrative mistakes that the Corps of Engineers had made in earlier decades by construing the geographic jurisdiction of the R&H Act of 1899 §10 program more narrowly than the §10 statute would have allowed. Thus, according to the Albrecht/Nickelsburg Article, in 1972 Congress intended to ensure that the new FWPCA statute would assert jurisdiction *only* over all categories of §10 navigable waters, including: "[W]aters landward of the harbor lines [i.e., lines that the Corps had established for U.S. harbors under §11 of the R&H Act of 1899[52]], waters susceptible for use in navigation with reasonable improvements, waters subject to the ebb and flow of the tide, and the then-highly controversial jurisdiction over intrastate lakes . . . ."[53]

To support that novel claim, Albrecht and Nickelsburg resorted to a clever "sleight of hand" trick and employed one of the oldest fallacies known to logic, which is often referred to as the "*post hoc, ergo propter hoc*" fallacy ("after the fact, therefore, because of the fact"). Here is a summary of the so-called legislative history of the FWPCA of 1972 as presented by and relied on by the Albrecht/Nickelsburg Article. During the early 1970s, a key congressional committee, named "the [U.S.] House [of Representatives] Committee on Government Regulations"[54] led Congress in pressing the Corps to change Corps regulations and practices implementing its regulatory authority under §10 of the R&H Act of 1899, so that §10 would regulate all of the traditional navigable waters that could be legally subject to §10 authority. The concern of the aforementioned House Committee, which concern allegedly was shared by certain unnamed "[k]ey members of the Congress,"[55] is magically transformed during the course of the Albrecht/Nickelsburg Article's discussion into the "Congress' concern,"[56] which in turn is alleged to explain what Congress as a whole did as "Congress was finalizing the FWPCA Amendments of 1972."[57] As part of their Article's discussion, Albrecht and Nickelsburg cited two House of Representative Reports[58] and concluded that the particular concerns of that one House Committee regarding the jurisdiction of the Corps' R&H Act of 1899 §10 regulatory program fully explain and reflect the concerns and intentions of the entire Congress regarding the geographic jurisdiction of the FWPCA of 1972.[59]

Here are the actual facts that the Albrecht/Nickelsburg Article referred to, but entirely misrepresented, when that Article incorrectly claimed that those facts were essential to

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[50] *Id.*

[51] It is significant that the Congressional Research Service (CRS), at the request of Congress, amassed an official legislative history of the FWPCA of 1972, published as CRS, Legislative History of the Water Pollution Control Act Amendments of 1972 (1973). None of the various hearings and reports of the House Committee on Government Operations relied on to justify the conclusions of the Albrecht/Nickelsburg Article appear in that official legislative history (so far as I can determine), because those reports and hearings were unrelated to and irrelevant to the actual legislative history of the FWPCA of 1972.

[52] 33 U.S.C. §404.

[53] Albrecht & Nickelsburg, *supra* note 1, at 11047.

[54] *See id.* at 11045.

[55] *See id.*

[56] *See id.* at 11046.

[57] *Id.*

[58] *See id.* at 11045-46 nn.36-42.

[59] *See id.* at 11045-49.

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the legislative history of the FWPCA of 1972. So far as I can determine, there has never been any such committee as the "House Committee on Government Regulations." However, it is true that in the few years preceding 1972, the House of Representatives Committee on *Government Operations* did hold hearings and issue reports urging the Corps of Engineers to change Corps regulations and practices to broaden the geographic jurisdiction of the §10 permit program under the R&H Act of 1899. The House of Representatives hearings and reports referenced in the Albrecht/Nickelsburg Article all relate to those hearings and reports of the House Committee on Government Operations, and particularly of the Conservation and Natural Resources Subcommittee of the Committee on Government Operations.

It is also true that in the late 1960s and early 1970s, the Corps did change its regulations, administrative guidance, and administrative practices in a step-by-step, piecemeal manner to expand the Corps' implementation of the full statutory jurisdiction of the §10 program. The final codification of those changes appeared in the *Federal Register* on September 9, 1972, more than a month before the FWPCA of 1972 was enacted into law on October 18, 1972.[60] However, the assertion of the Albrecht/Nickelsburg Article that the geographic jurisdiction of the FWPCA of 1972 was intended and designed by Congress merely as a statutory codification of the modest expansions of the geographic jurisdiction of the §10 program that the Corps had already adopted by rulemaking in September 1972 is much more fanciful than their mythical "House Committee on Government Regulations" and constitutes a clever and entirely misleading application of the *"post hoc, ergo propter hoc"* fallacy.

The House of Representatives Committee on Government Operations was (and is) an *oversight* committee with no responsibility for formulating, drafting, or enacting legislation. So far as I can determine, the House Committee on Government Operations had no involvement whatever in developing or drafting the FWPCA of 1972. Those responsibilities in the House of Representatives belonged to the House Public Works and Environment Committee. In other words, the "legislative history" regarding the geographic jurisdiction of the FWPCA of 1972 concocted in the Albrecht/Nickelsburg Article from the unrelated activities of the House Committee on Government Operations concerning the jurisdiction of §10 of the R&H Act of 1899 refers to a "legislative sideshow" that had nothing to do with the framing and enactment of the FWPCA of 1972.

Far from being a significant concern of the Congress as a whole, the congressional project to encourage the Corps of Engineers to utilize to the fullest its authority under §10 of the Rivers and Harbors Act of 1899 was essentially the project of one activist chairman of a congressional oversight subcommittee. That activist was Rep. Henry S. Reuss (D-Wis.), the Chairman of the Conservation and Natural Resources Subcommittee of the House Committee on Government Operations. The Albrecht/Nickelsburg Article managed a remarkable sleight of hand trick when it magically transformed the concerns of that one activist House of Representatives subcommittee chairman into the paramount concerns of the Congress as a whole, in order to magically transform the legislative history of the FWPCA of 1972 into something new and unrecognizable. Of course, the finale of the trick was an amazing "disappearing act" that allegedly took away from the FWPCA of 1972 more than 99% of its actual geographic jurisdiction.

It is probably true that Congress did intend the geographic jurisdiction of the new FWPCA of 1972 to include the full extent of the broadest possible interpretation of §10 jurisdiction, since that would constitute only the small but important core of the total tributary system that drains into §10 navigable waters. However, the most reasonable reading of the legislative history of the FWPCA of 1972 demonstrates that Congress intended the new statute's jurisdiction to extend much farther than §10's jurisdiction, including all tributaries to the §10 waters, as is explained below.

If in 1972 Congress as a Whole Wanted to Broaden the Geographic Jurisdiction of §10 of the R&H Act of 1899, Congress Surely Would Have Amended That Statute; It Has Never Done So

If the Albrecht/Nickelsburg Article were correct in its assertion that a paramount concern of the entire Congress in 1972 was to ensure that the full statutory jurisdiction of §10 of the R&H Act of 1899 would be exercised over all navigable-in-fact waters, then in all likelihood at some point Congress at least would have amended §10 itself to achieve that result. Nevertheless, despite the hearings and pronouncements of the Conservation and Natural Resources Subcommittee of the House of Representatives Committee on Government Operations on that subject, Congress as a whole never did enact any legislation to expand the geographic jurisdiction of §10, relying instead on administrative actions by the Corps to accomplish that goal. Some of those Corps administrative changes and Corps assertions of §10 jurisdiction over certain water bodies based on those administrative changes were later overturned by the federal courts precisely because the §10 statute had not been amended by Congress. These facts provide further evidence that the House Committee on Government Operations' hearings and reports on §10 jurisdiction were a "legislative side show" not embraced by Congress as a whole, contrary to the assertions of the Albrecht/Nickelsburg Article.

Both before and after Congress enacted the FWPCA of 1972, §10 has been an important regulatory authority for protecting navigable waters, so it was entirely reasonable for the House Committee on Government Operations to urge the Corps to implement that authority to the fullest. Section 10 was originally intended to protect navigation and the navigable capacity of the navigable waters, but from 1968 on the Corps, by regulation and practice, used §10 to protect the total public interest in the navigable waters, including all aspects of environmental quality. While §10's basic geographic jurisdiction has always been limited to traditional navigable waters, its "activity jurisdiction" has always been very broad: §10 requires a federal permit for almost any structure or human activity that would affect the course, condition, or capacity of any of the traditional navigable waters. Section 10 does not regulate or control water pollution per se, but expansion of §10's limited geographic jurisdiction would have been a great advance for many other aspects of environmental protection, and for protection of the public interest in general, just as the Conservation and

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[60] *See* U.S. Army Corps of Engineers, Definition of Navigable Waters of the United States, 37 Fed. Reg. 18279 (Sept. 9, 1972).

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Natural Resources Subcommittee of the House Committee on Government Operations told the Corps, as referenced in the Albrecht/Nickelsburg Article.[61]

It would have been relatively easy for Congress to amend §10 to ensure the result that the Albrecht/Nickelsburg Article insists was the major goal of the entire Congress in 1972, yet Congress never did that. Moreover, the failure of Congress to amend §10 to achieve the goals ascribed to Congress as a whole by the Albrecht/Nickelsburg Article resulted in the frustration of some of those very goals. For example, at the urging of the House Committee on Government Operations, as referenced in the Albrecht/Nickelsburg Article, the Corps did assert §10 jurisdiction over a number of landlocked lakes, including the Great Salt Lake in Utah, Lake Minnetonka in Minnesota, and Devils Lake in North Dakota. However, because Congress never enacted any legislation broadening §10's geographic jurisdiction (despite the Albrecht/Nickelsburg Article's assertion that such was the entire Congress' primary goal), three separate federal courts of appeals later held that the Corps' assertion of §10 jurisdiction over those landlocked lakes was not authorized by the R&H Act of 1899.[62] The Corps has no §10 jurisdiction over those landlocked lakes to this day.

These facts indicate that the Albrecht/Nickelsburg Article entirely misrepresented the degree that Congress as a whole was focused on expanding the geographic jurisdiction of the §10 regulatory program in 1972, even though the House Committee on Government Operations did urge the Corps to do that through administrative actions. Instead, in 1972 Congress as a whole was focusing on new, unprecedented, landmark federal legislation to address comprehensively the serious national problem of water pollution. That legislation, the FWPCA of 1972, had very little, if anything, to do with the geographic jurisdiction of §10 of the R&H Act of 1899, a provision of law that had hardly anything to do with water pollution.

Congress Enacted the FWPCA of 1972 to Address the Jurisdictional Inadequacies of the Water Quality Act of 1965, Not any Inadequacies of §10 of the R&H Act of 1899, and Congress Included Non-Navigable Tributaries in the Jurisdiction of the FWPCA of 1972

Contrary to the assertions of the Albrecht/Nickelsburg Article, the limited geographic jurisdiction of §10 of the R&H Act of 1899 was not the primary basis used by Congress to establish the scope of the CWA's jurisdiction, as enacted in the FWPCA of 1972. Instead, the legislative history of the FWPCA demonstrates that Congress focused on the inadequacies of the Water Quality Act of 1965 as the starting point for crafting the expanded jurisdiction of the FWPCA of 1972. That same legislative history demonstrates that Congress intended the FWPCA of 1972 to cover all tributaries of the navigable waters.

In its discussion of the legislative history of the FWPCA of 1972, the Albrecht/Nickelsburg Article stated that "[t]he deletion of 'tributaries' from the [U.S.] Senate Bill and the adoption of language very close to the [House of Representatives] Bill could indicate that Congress intended the 'navigable waters' to conform to their contemporary understanding, without the artificial limits that had been the subject of discussion between Congress and the Corps."[63] The Albrecht/Nickelsburg Article goes on to conclude:

> In sum, the legislative history of the 1972 Amendments suggests that Congress did, indeed, intend to broaden significantly the reach of federal regulatory authority over the nation's waters. But the debate was framed in terms of the traditional navigable waters—specifically, how far federal power could reach if the term *navigable waters* was given its "broadest possible constitutional interpretation." [C]ommittee reports and floor statements were referring to the interpretations that had been at issue in the immediately preceding period under the Rivers and Harbors Act.[64]

The Albrecht/Nickelsburg Article also pointed to how the Senate bill that resulted in the FWPCA of 1972 defined "navigable" and stated:

> The Senate [b]ill defined "navigable waters" as "the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes."
>
> The final compromise eliminated "tributaries" from the Senate bill and "navigable" from the House bill, defining the "navigable waters" as simply "the waters of the United States."[65]

The fact that the FWPCA of 1972 created and relied on that new term of art, "the waters of the United States," is highly significant. If the Albrecht/Nickelsburg Article were correct in its assertion that Congress intended to limit the geographic jurisdiction of the FWPCA of 1972 to only the §10 navigable waters, then in all probability Congress would have used only the term "the navigable waters" and presumably would have defined that term as meaning the traditional navigable waters of the United States. The fact that the FWPCA of 1972 provided a new definition for "navigable waters," i.e., "the waters of the United States," strongly suggests that the CWA was intended to have a jurisdiction substantially greater than the limited §10 navigable waters; this fact was confirmed by the CWA's legislative history from 1972, as well as the legislative history of the FWPCA Amendments of 1977.

Important evidence contradicting the conclusions of the Albrecht/Nickelsburg Article can be found buried in a footnote of that same Article, which quotes the entire portion of the Senate Report's explanation of what the jurisdiction of the FWPCA of 1972 was intended to be; it reads as follows:

> The control strategy of the Act extends to navigable waters. The definition of this term means the navigable wa-

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[61] In theory, §10 could have been used indirectly to address a small part of the problem of water pollution, given the fact that a §10 permit application for any structure or work in navigable waters that could result in the discharge of a pollutant (either through the construction of the structure or work, or through the operation of the structure) supposedly could require the processing of a state water quality certification under CWA §401, 33 U.S.C. §1341. Unfortunately, for many years after 1972, Corps Regulatory Branch officials refused to recognize that any activity requiring only a §10 permit could ever trigger the need for a state CWA §401 water quality certification, so as a practical matter §10 could not be used effectively to address water pollution even indirectly during the 1970s and 1980s.

[62] *See* Hardy Salt Co. v. Southern Pac. Transp. Co., 501 F.2d 1156 (10th Cir. 1974); Minnehaha Creek Watershed Dist. v. Hoffmann, 597 F.2d 617, 9 ELR 20334 (8th Cir. 1979); and National Wildlife Fed'n v. Alexander, 613 F.2d 1054, 10 ELR 20060 (D.C. Cir. 1979).

[63] Albrecht & Nickelsburg, *supra* note 1, at 11047.

[64] *Id.* at 11048 (emphasis in original).

[65] *Id.* at 11047.

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> ters of the United States, portions thereof, *tributaries thereof*, and includes the territorial seas and the Great Lakes. Through a narrow interpretation of the definition of interstate waters, the implementation (of the) *1965 Act* was severely limited. *Water moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.* Therefore, reference to the control requirements must be made to the navigable waters, portions thereof, *and their tributaries*.[66]

This quotation from the Senate Report reveals three important points. First, the report explicitly states that the FWPCA of 1972 would include in its geographic jurisdiction the tributaries of §10 navigable waters, contrary to the assertions of the Albrecht/Nickelsburg Article. Second, when promulgating the definition of "navigable waters" in the 1972 FWPCA, Congress had the inadequacies of the implementation of the Water Quality Act of 1965 in mind, not the House Committee on Government Operations' unrelated project to make the Corps assert the full jurisdictional scope of §10 of the Rivers and Harbors Act of 1899. Third, to remedy those inadequacies in federal jurisdiction, Congress intended that the jurisdiction of the FWPCA of 1972 should encompass the entire tributary system flowing into the navigable waters so that water pollutants could be controlled at their source, as the Senate Report explicitly stated. Congress did not intend to limit the jurisdiction of the FWPCA of 1972 to the "traditional" definition of "navigable waters" that limited (and still does limit) the geographic jurisdiction of §10 of the Rivers and Harbors Act of 1899.

Turning from the FWPCA of 1972's Senate Report to the FWPCA of 1972's legislative history from the House of Representatives, those same basic points are confirmed. The House Public Works and Environment Committee's report on the FWPCA of 1972 stated: "The water pollution control program *as we know it today* was put into present shape by enactment of the Water Quality Act of 1965 and the Clean Waters Restoration Act of 1966."[67] One might have expected that either the House or the Senate Report on the FWPCA of 1972 would have specifically and explicitly referenced and adopted the limited geographic jurisdiction of §10 of the Rivers and Harbors Act of 1899 if Congress had actually intended to limit the jurisdictional reach of the FWPCA of 1972 to those §10 navigable waters, as the Albrecht/Nickelsburg Article asserted.

Significantly, the Senate Report language focused on the full "hydrologic cycles" of water systems and on the FWPCA of 1972's goal of controlling the "sources" of pollutants; those were concepts not contemplated when Congress defined "the navigable waters of the United States" under §10 of the Rivers and Harbors Act of 1899.[68] Those essential goals of the FWPCA of 1972 could only be achieved if that new statute had jurisdiction over all of the tributaries of the traditional navigable waters, as well as over the navigable waters themselves.

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[66] S. Rep. No. 92-414, at 77 (1972), *reprinted in* 1 CRS, Legislative History of the Water Pollution Control Act Amendments of 1972, at 1495 (1973) (emphasis added) [hereinafter Legislative History]; *see also* Albrecht & Nickelsburg, *supra* note 1, at 11047 n.49.

[67] H. Rep. No. 92-911, at 68 (1972), *reprinted in* 1 Legislative History, *supra* note 66, at 755.

[68] S. Rep. No. 92-414, at 77 (1972), *reprinted in* 1 Legislative History, *supra* note 66, at 1495.

[69] Section 13 states the following, in pertinent part:

> It shall not be lawful to throw, discharge, or deposit . . . any refuse matter of any kind or description whatever . . . into any navigable water of the United States, or into *any tributary of any navigable water* from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit . . . material of any kind in any place on the bank of any navigable water, or on the bank of *any tributary of any navigable water*, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise . . . .

33 U.S.C. §407 (emphasis added).

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Congress Did Not Base the Jurisdiction of the FWPCA of 1972 on §10 of the Rivers and Harbors Act of 1899 Because §10 Was Not Intended to Address Water Pollution

Congress did not use the limited geographic jurisdiction of §10 of the Rivers and Harbors Act of 1899 as the model for establishing the jurisdiction of the FWPCA of 1972 because §10 was not a statute intended to control water pollution or capable of doing so. Section 10 was intended to protect navigation and the navigable capacity of the traditional navigable waters of the United States from unauthorized structures and work in the navigable waters. The one section of the Rivers and Harbors Act of 1899 that was intended to address water pollution was §13, which by its explicit terms did include in that section's geographic jurisdiction the non-navigable tributaries of the §10 navigable waters, as well as the §10 navigable waters themselves.[69] In 1972 Congress was well aware of that important distinction between §10's geographic jurisdiction and §13's jurisdiction. This important point is not discussed by the Albrecht/Nickelsburg Article.

The Albrecht/Nickelsburg Article attempted to establish the notion that in the FWPCA of 1972, and again in the FWPCA Amendments of 1977, Congress enacted landmark CWA legislation purporting to deal effectively with the very important national problem of water pollution of "the waters of the United States" while nonetheless excluding from the CWA's jurisdiction all non-navigable tributaries of the §10 navigable waters. In order to accept such a notion, one would have to conclude the following: in 1899 Congress had at least a rudimentary understanding of the nature of water pollution, i.e., that pollutants flow downstream from tributaries into the larger, navigable water bodies. That understanding led Congress to explicitly include the non-navigable tributaries of §10 navigable waters as an integral part of the geographic jurisdiction of the only section of the Rivers and Harbors Act of 1899 that did explicitly address water pollution, i.e., §13. Nevertheless, many decades later, in 1972, when Congress crafted and enacted federal legislation to deal comprehensively with the problem of water pollution, it had somehow forgotten that most rudimentary fact about water pollution, i.e., that pollution flows downstream from non-navigable tributaries into navigable water bodies. Thus, according to the Albrecht/Nickelsburg Article, Congress established a statutory structure for the FWPCA of 1972 that excluded from its jurisdiction all non-navigable tributaries of the §10 navigable waters. The only way that the Albrecht/Nickelsburg Article could be correct in its conclusions would be if Congress was perpetrating an unprecedented fraud on the nation in 1972 when it purported to be enacting comprehensive and effective federal legislation to deal with water pollution and stated in the first words of the FWPCA of 1972 that "the objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nations's waters."[70] Of course, there is an alternative explanation: Albrecht and Nickelsburg could be profoundly wrong in their assertion that the FWPCA of 1972 had no jurisdiction over non-navigable tributaries to the navigable waters.

Non-Navigable Tributaries to the Navigable Waters Are Referred to in a Number of Places in the Legislative History of the FWPCA of 1972 as Part of the Intended Jurisdictional Scope of the New Legislation

The Albrecht/Nickelsburg Article does admit that Congress intended to expand the definition of "navigable waters" in the FWPCA of 1972. However Albrecht and Nickelsburg based their conclusions on hearings and reports of the House Committee on Government Operations that are not really part of the legislative history of the FWPCA of 1972, and which have never been regarded as part of the legislative history of the FWPCA of 1972 before the Albrecht/Nickelsburg Article resurrected them. Nevertheless, Albrecht and Nickelsburg rely on those extraneous, unrelated activities of the House Committee on Government Operations to justify their allegation that Congress intended to expand the jurisdiction of the FWPCA to an extraordinarily limited degree, to include *only* "waters that were or had been navigable in fact or which could reasonably be so made; waters landward of the harbor lines; and intrastate, navigable waters that are linked to intrastate commerce via overland connections. Any waters beyond these 'navigable waters' were to remain 'waters of the State.'"[71] This narrow interpretation is contradicted by yet another part of the actual legislative history of the FWPCA of 1972 that the Albrecht/Nickelsburg Article itself cited as significant in footnote 57 of their Article. That was an important floor statement from Rep. John D. Dingell (D-Mich.), which states:

> The conference bill defines the term "navigable waters" broadly for water quality purposes. *It means all "the waters of the United States" in a geographical sense.* It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws . . . .
>
> The authority of Congress over navigable waters is based on the Constitution's grant to Congress of "Power . . . to regulate commerce with Foreign Nations and among the several States . . . ." Although most interstate commerce 150 years ago was accomplished on waterways, there is no requirement in the Constitution that the waterway must cross a State boundary in order to be within the interstate commerce power of the Federal Government. Rather, it is enough that the waterway serves as a link in the chain of commerce among the States as it flows in the various channels of transportation—highways, railroads, air traffic, radio and postal communication, waterways, et cetera. The "gist of the Federal test" is the waterway's use "as a highway," *not whether it is "part of navigable interstate or international commercial highway."*
>
> Thus, this new definition clearly encompasses all water bodies, including main streams *and their tributaries*, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill.[72]

While this Article will not attempt to present a comprehensive analysis of the legislative history of the FWPCA of 1972, even a careful reading of those few portions of actual legislative history of the 1972 Act that the Albrecht/Nickelsburg Article itself quoted in footnotes indi-

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[70] *Id.* §1251(a).

[71] Albrecht & Nickelsburg, *supra* note 1, at 11055.

[72] 1 LEGISLATIVE HISTORY, *supra* note 66, at 250-51 (emphasis added). *See also* Albrecht & Nickelsburg, *supra* note 1, at 11048 n.57.

[73] *See* 474 U.S. at 121.

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cates that Congress intended to include non-navigable tributaries to navigable waters in the FWPCA's definition of "the waters of the United States."

The legislative history and analysis cited above demonstrates that the Albrecht/Nickelsburg Article's "evidence," analysis, and conclusions about the geographic jurisdiction of the FWPCA of 1972 are fallacious and misleading. While it is true that Congress did not provide an absolutely clear and explicit statement of what the geographic jurisdiction of the FWPCA of 1972 was intended to be, there is far more evidence and logic supporting the inclusion of non-navigable tributaries in the 1972 Act's jurisdiction than supporting the exclusion of those tributaries, as alleged in the Albrecht/Nickelsburg Article. However, to whatever extent there were ambiguities regarding how far Congress intended the jurisdiction of the FWPCA of 1972 to extend, EPA and the Corps of Engineers were clearly acting within their authorities in the several agency rulemakings based on the FWPCA of 1972 that interpreted the 1972 Act's jurisdiction as including all non-navigable tributaries.

Even if the Plain Words and Legislative History of the FWPCA of 1972 Were Somewhat Ambiguous Regarding the Extent of That Act's Jurisdiction, EPA and the Corps Acted Within Their Authorities When Their Administrative Procedure Act (APA) Rulemakings Interpreted and Implemented the FWPCA of 1972 to Assert Jurisdiction Over Non-Navigable Tributaries

Undoubtedly it can be argued that both the statutory words and legislative history of the FWPCA of 1972 contain some ambiguities regarding what Congress intended "the waters of the United States" to encompass. To whatever extent such ambiguities existed, they demonstrate that the essentially identical definitions of that term adopted by both EPA and the Corps to implement the FWPCA of 1972, after extensive APA rulemakings and based on considerable agency experience, was within those agencies' authority and, thus, was and is properly given deference by the federal courts. As will be described in more detail hereinafter, both EPA and the Corps adopted regulations interpreting and implementing the geographic jurisdiction of the FWPCA of 1972 as including non-navigable tributaries. Among those regulations implementing the FWPCA of 1972 were the Corps of Engineers' regulations of 1975 and 1977, both of which explicitly asserted jurisdiction over all non-navigable tributaries to navigable waters, as well as over all wetlands adjacent to both navigable and non-navigable waters. Those were substantively the regulations reviewed and upheld by the Court in *Riverside Bayview Homes.*[73] The Court described those regulations as follows: "[I]n 1975 the Corps issued interim final regulations redefining 'the waters of the United States' to include not only actually navigable waters but also tributaries of such waters . . . . 40 Fed. Reg. 31320 (1975)."[74] Even though the precise issues being litigated in the *Riverside Bayview Homes* case led the Court in that decision to focus on, and to uphold CWA jurisdiction over, wetlands "adjacent" to other waters of the United States, the legal principles that controlled the *Riverside* decision demonstrate clearly why EPA and the Corps acted within their authority when they both adopted regulations construing the FWPCA of 1972's jurisdiction as including all non-navigable tributaries.

The Court's unanimous decision in *Riverside Bayview Homes* summarized the difficult problem of defining the limits of CWA jurisdiction as follows:

> Faced with such a problem of defining the bounds of its [CWA] regulatory authority, an agency may appropriately look to the legislative history and underlying policies of its statutory grants of authority. Neither of these sources provides unambiguous guidance for the Corps in this case, but together they do support the reasonableness of the Corps' approach of defining adjacent wetlands as "waters" within the meaning of §404(a).[75]

In *Riverside Bayview Homes*, the Court reviewed in some detail the legislative history and underlying policies of the FWPCA of 1972 and considered the Corps' determination by APA rulemaking that adjacent wetlands are an important part of the total aquatic system and play an important role in protecting the water quality of the other "waters of the United States." The Court properly described the Corps' regulations as having construed the term "the waters of the United States" in the FWPCA of 1972 as follows: "The regulation extends the Corps' authority under [§]404 to all wetlands adjacent to navigable or interstate waters *and their tributaries.*"[76] The Court went on to hold in *Riverside Bayview Homes*: "We are thus persuaded that the language, policies, and history of the Clean Water Act compel a finding that the Corps has acted reasonably in interpreting the Act to require permits for the discharge of fill material into wetlands adjacent to the 'waters of the United States.'"[77]

The Court's unanimous decision in *Riverside Bayview Homes* is still the law of the land, notwithstanding the unconvincing efforts of some to limit that decision to its facts after the *SWANCC* decision. It would be completely illogical to conclude that Congress and the responsible federal agencies were authorized by the FWPCA of 1972 to extend by APA rulemaking that statute's jurisdiction to wetlands adjacent to other waters of the United States in order to implement the FWPCA of 1972's goals of protecting water quality (as the *Riverside Bayview Homes* decision held), but that neither Congress nor the agencies could or did extend the FWPCA of 1972's jurisdiction to the non-navigable tributaries, which have far greater importance to the quality of the navigable waters than adjacent wetlands do. The essence of the *Riverside Bayview Homes* decision is that the underlying purpose of the CWA is to protect water quality, not navigation, and thus that the FWPCA of 1972's geographic jurisdiction extended not only to navigable waters, but to other aquatic areas that protect the quality of navigable waters. Given the policies and legislative history of the FWPCA of 1972 cited and relied on by the Court in *River-*

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[74] *Id.* at 123.

[75] *Id.* at 132.

[76] *Id.* at 129.

[77] *Id.* at 139.

[78] As of the date this Article was written, at least one post-*SWANCC* U.S. court of appeals decision presents a particularly thoughtful, well-reasoned analysis of the "deference" issue regarding EPA and Corps regulatory definition of CWA jurisdiction, and upholds CWA jurisdiction over the full tributary system to navigable waters: United States v. Deaton, 332 F.3d 698, 33 ELR 20223 (4th Cir. 2003).

[79] *See* Albrecht & Nickelsburg, *supra* note 1, at 11055-56.

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side Bayview Homes, it is clear that Congress intended the FWPCA of 1972 to regulate non-navigable tributaries. If the Corps' regulations defining wetlands adjacent to other waters of the United States as subject to the jurisdiction of the FWPCA of 1972 were reasonable and deserving of judicial deference, as the Court held in *Riverside Bayview Homes*, then *a fortiori* EPA's and the Corps' regulations defining non-navigable tributaries of the navigable waters as subject to the jurisdiction of the FWPCA of 1972 were and are equally reasonable and must be given deference by the federal courts and upheld.[78]

The Albrecht/Nickelsburg Article tried to obscure these fundamental points by claiming that the Court's *Riverside Bayview Homes* decision is no longer good legal authority after *SWANCC* and is now limited to its facts. Albrecht and Nickelsburg also claim that the EPA and Corps regulations were illegal to the extent that they construed the jurisdiction of the FWPCA of 1972 as including any aquatic area outside navigable-in-fact §10 navigable waters because, they insist, Congress limited the jurisdiction of the FWPCA of 1972 to the navigable-in-fact §10 waters. To reconcile that latter conclusion with even the most narrow reading of the *Riverside Bayview Homes* decision, Albrecht and Nickelsburg must resort to the illogical notion that Congress ratified EPA's and the Corps' assertion of CWA jurisdiction over adjacent wetlands by enacting the FWPCA Amendments of 1977, but that allegedly Congress never ratified the same EPA and Corps regulations' assertion of CWA jurisdiction over non-navigable tributaries. Only a true believer of the Albrecht/Nickelsburg persuasion could swallow such a conclusion, and then only with the help of much "faith-based" thinking.

As we have seen, the Albrecht/Nickelsburg Article's conclusions regarding the jurisdictional scope of the FWPCA of 1972 were wrong for the various reasons cited above.

Nevertheless, based on their erroneous interpretation of the legislative history of the FWPCA of 1972, Albrecht and Nickelsburg went on to insist that to this day no CWA jurisdiction exists over non-navigable tributaries, *unless* some unknown legal wonder-worker can locate some hitherto unidentified clear and explicit statutory confirmation of jurisdiction over non-navigable tributaries in the text (or possibly in the legislative history) of the FWPCA Amendments of 1977.[79] A fair reading of the Albrecht/Nickelsburg Article is that those authors do not believe that such a feat can be accomplished. However, because the essential foundation of their position relies on their mistaken and disproved assertions regarding the FWPCA of 1972, one need not take their challenge regarding the 1977 FWPCA Amendments very seriously. In addition, however, both the Albrecht/Nickelsburg Article and the most troubling *obiter dicta* from the *SWANCC* decision relied heavily on a strange legal artifact from the 1970s: the Corps of Engineers' final rule of April 3, 1974. We will now turn our attention to that subject.

The Corps of Engineers' Final Rule of April 3, 1974, Provides No Reliable Support for the Assertions of the Albrecht/Nickelsburg Article Regarding the Jurisdiction of the FWPCA of 1972

One of the most important, and most superficially plausible, arguments made in the Albrecht/Nickelsburg Article is based on the following notion: the Corps of Engineers' final rule of April 3, 1974, interpreted CWA jurisdiction to cover only the §10 navigable waters and to exclude from CWA jurisdiction all non-navigable tributaries to those §10 waters. In addition, *obiter dicta* in the Court's *SWANCC* decision seemed to endorse that early Corps interpretation of the proper scope of CWA jurisdiction as possibly reflecting the original intent of Congress in the FWPCA Amendments of 1972.[80] Thus, the Albrecht/Nickelsburg Article relies heavily on that Corps final rule of April 3, 1974, as evidence supporting their own assertion that the jurisdiction of the FWPCA of 1972 was limited to the §10 navigable waters. However, careful analysis demonstrates that the long-discredited Corps final rule of April 3, 1974, provides no real support for the Albrecht/Nickelsburg Article's conclusions about the intent of Congress regarding the jurisdiction of the FWPCA of 1972.

As quoted in full below, the Court's dicta in *SWANCC* noted that the Corps' final rule of April 3, 1974, tried to limit the jurisdiction of CWA §404 to the §10 navigable waters; then the Court's decision stated: "Respondents put forward no persuasive evidence that the Corps mistook Congress' intent in 1974."[81] Most of the remainder of this Article will attempt to provide the "persuasive evidence" that the Court's *SWANCC* dicta seemed to invite by claiming that no such evidence had yet been put forward. The following discussion will demonstrate that the Corps' final rule of April 3, 1974, was not a legitimate or successful attempt to discern and implement the intent of Congress regarding the geographic jurisdiction of the FWPCA of 1972, and that the Corps' 1974 final rule is totally useless for determining the CWA's current jurisdictional reach.

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[80] *See* 531 U.S. at 168:

> Indeed, the Corps' original interpretation of the CWA, promulgated two years after its enactment, is inconsistent with that which it espouses here. Its 1974 regulations defined [§]404(a)'s "navigable waters" to mean "those waters of the United States which are subject to the ebb and flow of the tide, and/or are presently, or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce."

33 C.F.R. §209.120(d)(1). The Corps emphasized that "it is the water body's capability of use by the public for purposes of transportation or commerce which is the determinative factor." *Id.* §209.260(e)(1). Respondents put forward no persuasive evidence that the Corps mistook Congress' intent in 1974.

[81] *Id.*

[82] *See* Albrecht & Nickelsburg, *supra* note 1, at 11049-50.

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Even Taking the Corps' Final Rule of April 3, 1974, at Face Value, It Provides No Support for the Albrecht/Nickelsburg Assertions About the Jurisdiction of the FWPCA of 1972 as a Whole, and Is Irrelevant to the Jurisdiction of the Current CWA

The first important point to note regarding the Corps' final rule of April 3, 1974, is that it explicitly purported to address *only* the geographic jurisdiction of the *Corps'* regulatory authorities, such as §10 of the Rivers and Harbors Act of 1899 and, most importantly for our discussion, *§404* of the FWPCA of 1972. On its face, the Corps' 1974 final rule did *not* purport to address the geographic jurisdiction of any part of the FWPCA of 1972 other than §404, nor of the FWPCA of 1972 as a whole. Thus, the Corps' 1974 final rule was predicated on two important legal assumptions that we now know to have been false: (1) the assumption that §404 of the FWPCA of 1972 had a geographic jurisdiction different from (and smaller than) the jurisdiction of the rest of the FWPCA of 1972; and (2) the assumption that the Corps had the right to establish the geographic jurisdiction of §404 of the FWPCA of 1972 unilaterally, without the agreement of EPA.

Taking the Corps' final rule of April 3, 1974, at face value, it was an attempt to establish the geographic jurisdiction of §404 of the FWPCA of 1972 as identical to the geographic jurisdiction of §10 of the Rivers and Harbors Act of 1899, even though that would give FWPCA §404 a vastly more limited geographic reach than all the other sections and programs of the FWPCA. As I will explain hereinafter, the Corps had several policy, practical, and political reasons in 1974 to make the attempt to carve out a separate, limited jurisdiction for the FWPCA §404 program, whether or not that attempt could or would ultimately be upheld by the federal courts. One must remember that in 1974 the Corps, at least in theory, could act on the assumption that it had the legal right, as the federal agency primarily responsible for administering the new FWPCA §404 regulatory program, to establish by rulemaking the geographic jurisdiction for the §404 program, even if that jurisdiction would be substantially more restricted than the jurisdiction of the rest of the FWPCA of 1972, as established by EPA's rulemakings. The "Civiletti opinion," discussed above, in which Attorney General Civiletti refuted that notion and ruled that EPA—not the Corps—had legal authority to determine the extent of geographic jurisdiction for the entire CWA, including §404, was not issued until 1979.

It is quite understandable that the Corps' final rule of April 3, 1974, purported to address the geographic jurisdiction of FWPCA §404, and not the FWPCA of 1972 as a whole, because, as the Albrecht/Nickelsburg Article pointed out, at the time the Corps promulgated its final rule, it was aware that well before that date EPA had taken several separate administrative actions to define the extent of the FWPCA's geographic jurisdiction, including EPA's promulgation in the *Federal Register* of May 3, 1973, of a comprehensive final rule on the jurisdiction of the FWPCA of 1972.[82] The Corps' final rule of April 3, 1974, did not purport to challenge or disagree with the various earlier rules and other official pronouncements that EPA had promulgated asserting FWPCA of 1972 jurisdiction over all of the tributaries to the traditional navigable waters *for purposes of the FWPCA of 1972 as a whole, or for specific FWPCA provisions and programs other than the Corps' §404 program.*

With regard to the current debate about CWA jurisdiction after *SWANCC*, it is significant that the Corps' unilateral attempt in 1974 to establish a restricted, special geographic jurisdiction for the Corps' FWPCA §404 regulatory program was founded on two legal assumptions that are now known to have been wrong. First, we now know that, within the Executive Branch, it is EPA, not the Corps, that had and has the ultimate legal authority to establish by regulation the geographic jurisdiction for the entire CWA, including CWA §404.[83] In addition, after 1974 the law became established and clear that there is only one universal geographic jurisdiction for the entire CWA, and that the CWA §404 regulatory program must have the same geographic jurisdiction as all the other sections of the CWA (unless and until the law changes).[84] Consequently, the notion that the Corps' long-abandoned and long-discredited final rule of April 3, 1974, was somehow determinative regarding the jurisdiction for the entirety of the FWPCA of 1972, or regarding the entire CWA of today, is clearly wrong, if only because the Corps itself in 1974 directed that rule only at the §404 program, and not at any other program of the FWPCA of 1972 or at the FWPCA of 1972 as a whole. Moreover, the Corps never had legal authority to determine the jurisdiction of §404 of the FWPCA of 1972 without the agreement of EPA, and EPA never approved or agreed with the Corps' rule of April 3, 1974.

Given the fact that the Corps' final rule of April 3, 1974, has been superseded by several subsequent EPA and Corps of Engineers APA rulemakings that have long recognized the full scope of the CWA's geographic jurisdiction, the long-revoked Corps of Engineers final rule of 1974 would appear to be totally irrelevant to current debates regarding CWA jurisdiction. Nevertheless, the Albrecht/Nickelsburg Article flatly asserts, and the Court's dicta in *SWANCC* could be read to imply, that the Corps' final rule of April 3, 1974, somehow reflected the "true intent" of Congress regarding the proper jurisdiction of the FWPCA of 1972, or possibly even regarding the proper geographic jurisdiction of the current CWA. A more detailed examination of the Corps' final rule of April 3, 1974, is necessary to determine whether the Albrecht/Nickelsburg Article's assertions and the possible implications of the *SWANCC* dicta could possibly be true.

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[83] *See* 43 Op. Att'y Gen. No. 15, *supra* note 42. *See also* CWA §101(d): "Except as otherwise expressly provided in this Act, the Administrator of the Environmental Protection Agency (hereinafter in this Act called 'Administrator') shall administer this Act." 33 U.S.C. §1251(d).

[84] *See* 43 Op. Att'y Gen. No. 15, *supra* note 42; *see also supra* note 41 and accompanying text.

[85] *See supra* note 67.

[86] Memorandum from William R. Orlandi, Acting General Counsel, U.S. Army Corps of Engineers, to Director of Civil Works, U.S. Army Corps of Engineers, on Problem Areas Resolved in Corps Regulatory Programs Following Passage of Recent Legislation (Dec. 13, 1972) (on file with author).

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The Corps' Final Rule of April 3, 1974, Was Not a Legitimate and Serious Attempt to Divine and Implement the Intent of Congress Regarding the Jurisdiction of the FWPCA of 1972

The historic record demonstrates that the Corps' final rule of April 3, 1974, was not a legitimate, thoughtful effort to discern and implement "the true intent of Congress" regarding the geographic jurisdiction of the FWPCA of 1972 as a whole, or even of FWPCA §404. Instead, the rule was the Corps' "long shot" effort to construe the FWPCA §404 program's geographic jurisdiction extremely narrowly, while recognizing that the 1974 rule would probably not be upheld by the federal courts. The Corps understandably determined that it had nothing to lose by promulgation of the final rule of April 3, 1974, since that rule might possibly be upheld by the Courts, and because even if the final rule were eventually overturned, the rule and the subsequent litigation would "buy time"so that the Corps and Congress could solve the Corps' acute practical and political problems dealing with the immense workload of the FWPCA §404 program. The Corps' 1974 final rule was also intended to "shift the responsibility and the blame" from the Corps to the federal courts for an eventual extension of Corps FWPCA §404 jurisdiction from the limited §10 navigable waters to "all waters of the United States," including all non-navigable tributaries and their adjacent wetlands.

The history of the Corps' final rule of April 3, 1974, is remarkable and well worth telling, especially given the fact that the rule was "resurrected" from historic obscurity by the Court's reference to it in *obiter dicta* in the *SWANCC* decision.[85] As noted above and further explained hereinafter, the Corps had several important reasons for promulgating the 1974 final rule, separate and apart from any notion that the rule was reflecting or implementing "the true intent of Congress" regarding the geographic jurisdiction of the FWPCA of 1972 as a whole.

Corps Acting General Counsel Orlandi's Legal Memorandum of December 13, 1972, Documents the Fact That the Corps Understood and Accepted the Reality That the Recently Enacted FWPCA of 1972 Asserted Jurisdiction Over Non-Navigable Tributaries to the §10 Navigable Waters

The historic record demonstrates that, after the FWPCA of 1972 had become law, the Corps fully understood that "the waters of the United States" that the new FWPCA of 1972 covered was much greater in geographic scope than "the traditional navigable waters of the United States" that the Corps had been regulating under §10 of the Rivers and Harbors Act of 1899. For example, on December 13, 1972, less than two months after the FWPCA of 1972 had become law, the Acting General Counsel of the Corps of Engineers, William R. Orlandi, signed an official legal memorandum addressed to the Corps' Director of Civil Works, i.e., the U.S. Army Major General in charge of all Corps Civil Works activities, with the following subject line: "Problem Areas to be Resolved in Corps Regulatory Programs Following Passage of Recent Legislation."[86] The first line of that memo stated: "This Memorandum is designated to highlight those problem areas . . . which have been raised by the Federal Water Pollution Control Act (Pub. L. No. 92-500) . . . ."

The first page of Orlandi's legal memorandum demonstrates that the Corps understood very well that non-navigable tributaries to the §10 navigable waters were part of the jurisdiction of the new FWPCA of 1972. That is hardly surprising, given the fact that the Corps itself had been statutorily responsible for regulating water pollution in those same non-navigable tributaries since 1899 under §13 of the Rivers and Harbors Act of 1899, commonly referred to as "The Refuse Act."[87] In fact, the Corps had been implementing a permit program under §13 of the 1899 Act for polluting point source discharges of pollutants into those same non-navigable tributaries of the §10 navigable waters (as well as in the §10 navigable waters themselves) from 1970 until late 1972. It was the transfer from the Corps to EPA of that §13 permit program in the non-navigable tributaries to §10 navigable waters, mandated by §402 of the new FWPCA of 1972, that led Acting General Counsel Orlandi to write the following:

> Since (Refuse Act) permits for discharges into *non-navigable tributaries* have been transferred to EPA, what course of action should the Corps take to control and remedy shoaling conditions in *navigable waters* which may occur as a result of discharges into *nonnavigable tributaries*? This will require coordination with EPA with resultant agreements being reduced to a memorandum of understanding between both agencies.[88]

Having recognized that the new FWPCA of 1972 as a general matter would regulate non-navigable tributaries to the traditional navigable waters, later in the same memorandum Acting General Counsel Orlandi raised the very delicate question of when and how the Corps would have to expand the geographic jurisdiction of its own regulatory program from the limited jurisdiction of §10 of the Rivers and Harbors Act of 1899, to regulate additional, non-navigable waters under the new §404 of the FWPCA of 1972:

> Should the Corps continue to use the definition of "navigable waters" as prescribed in ER 1165-2-302 (33 CFR 209.260) to define the scope of its regulatory jurisdiction, or expand its jurisdiction to include "*all* waters of the United States" which is the definition of "navigable waters" used in the [CWA]? It is possible that we would be confined to our current definition of "navigable waters" in the administration of our [§]10 permit program, but would have to expand our normal jurisdiction to include additional waters in the administration of the new [§]404 permit program.[89]

Note that the Corps' Acting General Counsel explicitly interpreted the FWPCA of 1972's jurisdictional mandate of "the waters of the United States" to mean "*all* waters of the United States" as the Corps' likely future expanded jurisdiction under §404 of the FWPCA of 1972.

A reader of the two quotations provided above from Acting General Counsel Orlandi's memorandum might wonder why Orlandi was clear and forthright when describing the plain fact that the FWPCA of 1972 as a whole (and

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[87] 33 U.S.C. §407.

[88] Memorandum from Corps Acting General Counsel Orlandi, *supra* note 86, ¶ 2a(2) (emphasis added).

[89] *Id.* ¶ 2(c)(5) (emphasis added).

[90] *Id.* ¶ 4 (emphasis added).

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FWPCA §402 in particular) regulated non-navigable tributaries to navigable waters, but he became more circumspect when gently suggesting that the Corps would also have to regulate not merely §10 navigable waters, but "all waters of the United States" under its new §404 permit authority. The explanation for that subtle change in tone relates to the Corps' vitally important policy, practical, and political concerns about its new §404 authority, and also provides the real story behind the Corps' final rule of April 3, 1974. The last sentence of the Orlandi legal memorandum of December 13, 1972, provides a fitting introduction to that history:

> In view of the fact that many of the problem areas raised by [the FWPCA of 1972] involve an *intermixture of legal and policy decisions*, it is suggested that representatives from your Directorate meet with members of my staff to resolve these matters. The principal contact in this office for these meetings will be Mr. Jacobus Lankhorst.[90]

Most of the remainder of this Article will explain the Corps' "policy decisions" of the early 1970s that motivated the Corps, in its final rule of April 3, 1974, temporarily to disavow the full scope of the FWPCA of 1972's geographic jurisdiction. The reader should also understand from Orlandi's "point of contact" sentence quoted above that the actual author of the legal memorandum of December 13, 1972, was the Corps' senior attorney responsible for Civil Works matters, Jacobus J. Lankhorst, who later was the primary author of the parts of the Corps' final rule of April 3, 1974, that are relevant to this discussion.

The Corps' Final Rule of April 3, 1974, Was Motivated in Large Measure by the Corps' Practical, Policy, and Political Needs, Rather Than by the Corps' View of Congress' Intent in the FWPCA of 1972

As is explained in Appendix 2 of this Article, the Corps' final rule of April 3, 1974, was motivated by a number of interrelated considerations. First, the primary author of the 1974 rule, Corps Assistant General Counsel Lankhorst, believed that a legally defensible case could be made that the Corps had statutory authority to establish by rulemaking a special, highly restricted geographic jurisdiction for the FWPCA §404 program, less extensive than the jurisdiction of the FWPCA of 1972 as a whole. Corps leaders understood that the 1974 rule would probably not be upheld by the federal courts, but they also knew that it might possibly withstand judicial review and that the Corps had nothing to lose by making the attempt. Even if the 1974 final rule were to be overturned as contrary to the mandates of the FWPCA of 1972, it would nevertheless serve to "buy time" so that the Corps and Congress could find solutions to a number of potentially overwhelming practical and political problems that the Corps had to deal with in the 1972 to 1974 period. Those problems were caused by the fact that §404 of the FWPCA of 1972 imposed vastly greater regulatory responsibilities on the Corps than the Corps' actual or potential regulatory resources could possibly deal with in 1974 without both legislative relief from Congress and the creation and use of new regulatory mechanisms that did not exist in 1974.

As it happens, I know a good deal about the policy, political, and practical considerations that constituted the full explanation of the Corps' final rule of April 3, 1974, from my familiarity with the history of the Corps' regulatory program, the historic record of that period, and from personal discussions that I have had with the authors, reviewers, and defenders of that 1974 final rule during my early years in the Corps' Office of the Chief Counsel in the 1970s and more recently.[91] A number of documents in the Corps' archives, and many documents from the full legislative history of the FWPCA Amendments of 1977, corroborate and confirm the following explanation of the Corps' final rule of April 3, 1974. In addition, Appendix 2 of this Article presents additional, detailed corroboration of the explanation of the Corps' final rule of April 3, 1974, presented herein.

The enactment of the FWPCA of 1972 presented the Corps with significant benefits, but also with major challenges and problems. Even prior to enactment of the FWPCA of 1972, the Corps had to administer large-scale, important, and expanding regulatory responsibilities with very limited resources, including a small regulatory program work force. In 1972 the Corps had barely enough regulatory program staff to administer its existing permit responsibilities under §§9 and 10 of the Rivers and Harbors Act of 1899, which covered only the §10 navigable waters. One reason why the Corps' regulatory program was already overstressed and underresourced in 1972 was that between 1968 and 1972, the Corps had voluntarily undertaken sub-

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[91] The portions of the Corps' final rule of April 3, 1974, and its preamble, that related to the jurisdiction of FWPCA §404 were written by Lankhorst, who in 1974 was the Corps' Assistant General Counsel for Civil Works; his assistant in this task was William Hedeman, Esq. Lankhorst later became the Corps' Deputy General Counsel and served for many months as the Corps' Acting Chief Counsel after the retirement of General Counsel Manning Seltzer. Hedeman also had a distinguished career with the Corps, serving for years as the Corps' Assistant General Counsel, Environmental Law and Regulatory Programs. Unfortunately, both of those primary authors of the final rule of April 3, 1974, are now deceased. Fortunately, however, still alive and practicing law is another of the Corps' senior attorneys from the 1974 era who was involved in and has personal recollection of the final rule of April 3, 1974. That is Fred Disheroon, who is now a Senior Litigator at the DOJ. Disheroon worked in the Corps of Engineers Office of the General Counsel (now called the Office of the Chief Counsel) from August of 1970 until August of 1975. In 1974 Disheroon served as the Corps' Assistant General Counsel for Litigation, Enforcement, and Adversarial Proceedings, and in that capacity was personally involved in and knowledgeable about the Corps' final rule of April 3, 1974. Consequently, I asked Disheroon to read this Article's explanation of the circumstances that produced the Corps' final rule of April 3, 1974, and to verify that this explanation is consistent with his own personal knowledge of the matter. Disheroon has done that, and has provided me with the letter of attestation to that effect quoted in Appendix 2 of this Article.

[92] *See, e.g.*, Zabel v. Tabb, 430 F.2d 199, 1 ELR 20023 (5th Cir. 1970).

[93] 33 U.S.C. §404.

[94] *See* U.S. Army Corps of Engineers, Administrative Procedure-Harbor Lines, 35 Fed. Reg. 8280 (May 27, 1970) *(amending* 33 C.F.R. §209.150).

[95] As noted above, FWPCA §402 transferred from the Corps to EPA the Corps' permit program for discharges of refuse and other pollutants into navigable waters and their non-navigable tributaries that the Corps had been administering since President Richard M. Nixon and Congress set up and funded that permit program in 1970, using the permit authority of §13 of the Rivers and Harbors Act. When that permit program was transferred from the Corps to EPA, all of the Corps' "spaces" for personnel to administer that "Refuse Act" permit program were also transferred to EPA, along with all §13 permit files and applications.

[96] 33 U.S.C. §1413.

[97] During the 1970s "regulators" were sometimes referred to disparagingly in the Corps as "permit clerks," reflecting the fact that they were not "real engineers."

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stantial new regulatory responsibilities under the Rivers and Harbors Act of 1899 by means of new rules and new administrative guidance. For example, in 1968 the Corps had abandoned its former practice of evaluating applications for permits under §§9 and 10 of the Rivers and Harbors Act of 1899 only in terms of the proposed activity's potential effects on navigation, and had substituted the much more demanding and expansive "public interest review," which required Corps district engineers to consider potential effects of proposed activities needing permits on all aspects of the public interest, including wetlands and other environmental quality factors.[92] In addition, the Corps had implemented a series of extensions of the geographic jurisdiction of the regulatory program under §§9 and 10 of the Rivers and Harbors Act of 1899, as discussed earlier in this Article. Similarly, as of May 27, 1970, the Corps had begun to require standard, individual §10 permits for proposed activities shoreward of existing harbor lines that had been established over the years under the authority of §11 of the Rivers and Harbors Act of 1899,[93] which previously had required no further Corps authorization.[94] Consequently, even without any new legislation, in 1972 the Corps' regulatory program had barely sufficient resources to implement its expanded, fully implemented regulatory authorities under §§9 and 10 of the Rivers and Harbors Act of 1899.[95]

Even though the Corps' small regulatory work force was already heavily burdened in 1972, in that year the Corps suddenly found itself responsible for potentially huge new regulatory responsibilities, not only under the new FWPCA §404, but also under §103 of the Ocean Dumping Act of 1972,[96] and under several demanding new environmental laws that greatly increased the administrative workload involved in processing every Corps permit. Those new environmental laws included the Coastal Zone Management Act, the new requirements of the National Environmental Policy Act (NEPA), and other requirements imposed by statutes and regulations. For several years after 1972, the Corps did not have a large enough regulatory staff to administer effectively even a small fraction of its greatly expanded new regulatory responsibilities. In addition, the Corps had neither the ability nor the inclination to rapidly expand its regulatory staff to deal with its burgeoning new regulatory duties.

The difficulties that the Corps encountered after 1972 in obtaining appropriations and authorized spaces so that it could hire new regulatory staffers, and the time it would take to hire and train many new regulatory civil servants, can be readily understood. However, another important problem was the fact that the Corps' leadership during the 1970s was reluctant to expand the Corps' regulatory roles or personnel to the extent that full implementation of the new FWPCA of 1972 §404 program demanded. The Corps' senior leadership wanted the Corps to remain to the maximum extent possible an engineering agency, staffed with engineers who solved important U.S. military and civil engineering problems, not a regulatory agency staffed with lawyers and regulators.[97] In addition, Corps senior leaders were reluctant to increase regulatory staff to implement the new §404 program because they had grave reservations regarding the "political survivability" of the new program and regarding how the new §404 program would affect the Corps' all-important relationships with key congressional interests whose good will was vital to the Corps.

During the period of 1972 through 1974 the Corps had no way to know with certainty just how the new §404 regulatory program would eventually evolve or what Corps resources it would eventually require, but Corps leaders and senior attorneys soon realized that §404 had the potential to create serious problems for the Corps, as well as important benefits. In 1972 the Corps had been willing and eager to accept the new FWPCA §404 permit authority in the traditional navigable waters for one obvious reason: if the Corps had not taken on the legal responsibility to authorize discharges of dredged material and fill material under §404 of the new FWPCA of 1972, then EPA under FWPCA §402 (and the states that eventually would assume legal responsibility for the §402 program) would have gained authority to regulate and control all of those discharges of dredged or fill material, as the Senate bill originally would have required. In fact, one of the primary reasons why §404 was added to the new FWPCA of 1972 late in the legislative process was precisely because the House of Representatives insisted that the Corps, rather than EPA or the states, would authorize and permit all activities involving the discharge of dredged or fill material. Given the fact that virtually every Corps Civil Works water resource development project has always involved discharges of dredged material or fill material (often both) as that project is constructed, operated, and maintained, the Senate bill's proposal to have discharges of both dredged material and fill material regulated under §402 would have allowed EPA and the states to gain effective control over all Corps Civil Works water projects and activities, a situation that the Corps (and the House of Representatives) regarded as unacceptable. Consequently, since practically all of the Corps' water resource development projects were located in the §10 navigable waters, the Corps was eager to have responsibility for permit issuance under §404 for all discharges of dredged or fill material in those §10 navigable waters. The Corps' new CWA §404 authority in the §10 navigable waters allowed the Corps to give itself FWPCA authorizations for all of its own Civil Works projects and activities and to grant §404 permits for similar discharges required by the activities of port authorities, dredgers, and similar development interests well known to the Corps. In addition, FWPCA §404 allowed the Corps to authorize many military projects involving discharges of dredged or fill material in the §10 navigable waters. As for non-Corps projects involving discharges of dredged material or fill material into the §10 navigable waters, the Corps had to issue §9 or §10 permits under the Rivers and Harbors Act of 1899 for those projects in any event, independently of the FWPCA of 1972, so the new §404 permit responsibilities in the §10 navigable waters would impose relatively light new regulatory burdens on the Corps. For all of these reasons, in 1972 the Corps regarded its new FWPCA §404 permit authority in the §10 navigable waters as a net benefit to the Corps and not as an unwanted burden or problem.

In contrast, the new FWPCA of 1972 §404 permit responsibilities in the non-navigable tributaries and other non-navigable waters, e.g., wetlands, provided the Corps with no discernible benefits for its traditional water resource development activities or for its traditional role as an engineering and construction agency, but seemed to present the potential for practically unlimited and overwhelming regulatory responsibilities and problems. If, as seemed quite probable, the new FWPCA of 1972 would eventually have geographic

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jurisdiction over virtually every water body and aquatic area, e.g., wetlands, mud flats, etc., in the United States, and if the §404 program would require a Corps §404 permit for any and every activity involving the discharge of either dredged or fill material into any of those waters, then the Corps could easily find itself legally responsible for somehow permitting under §404 many hundreds of thousands of different projects and activities *every year*. From 1972 through 1974, the Corps' leadership came to realize that the new §404 permit responsibility over "all the waters of the United States" could overwhelm the Corps with regulatory duties that the Corps had neither the staff nor the legal means to perform effectively, but which could get the Corps into serious political, practical, and legal difficulties.

Moreover, the Corps soon came to realize that its potentially huge §404 regulatory responsibilities in the non-navigable waters would be a thankless task, entailing high political costs with few if any political rewards. No matter how many new regulatory resources the Corps might eventually be able to obtain to operate the §404 program in non-navigable waters, the Corps could never expect to please the environmentalists and their friends in Congress, who would always demand a higher level of environmental protection from the §404 program than the Corps could ever provide, either through denial of permits or through imposition of permit conditions. On the other hand, the inevitable, growing backlog of delayed and unprocessed §404 permit applications, and the very nature of the §404 regulatory program itself, as designed and controlled by EPA through its mandatory §404(b)(1) guidelines, would inevitably alienate and anger state and local governments, other federal agencies needing Corps §404 permits, development-oriented interests in general, and the Corps' traditional congressional supporters, all of which for many decades had been the Corps' natural collaborators and political constituency. While it is true that some members of Congress during the early 1970s were "pro-environment" supporters of the new FWPCA §404 regulatory program, those "green" congressional interests decidedly were not well represented on either the House of Representatives or Senate Appropriations Committee subcommittees that funded and oversaw all of the Corps of Engineers' Civil Works activities. To summarize, in the early 1970s, the new FWPCA §404 program with regard to *non-navigable waters* seemed to present the Corps with almost unlimited problems and with hardly any countervailing benefits.

If one wants to read a full account of the problems that the Corps faced during the early 1970s as it tried to cope with the burgeoning, practically overwhelming, regulatory responsibilities that the new FWPCA of 1972 §404 program seemed to impose, one need merely read through the full legislative history that culminated in the FWPCA Amendments of 1977. The Corps' problems in dealing with the §404 program were so serious and controversial during the early and mid-1970s that much of the debate in Congress leading up to the FWPCA Amendments of 1977 relate to the §404 program and to two competing, alternative approaches for new legislation that would solve its legal and political difficulties. As is well documented in the legislative history of the 1977 FWPCA Amendments, Congress in 1977 had to choose between two very different sets of proposals: (1) a proposed major "rollback" of the geographic jurisdiction of FWPCA §404 from "all waters of the United States" to only the §10 navigable waters (plus their adjacent wetlands); or (2) retention of the total FWPCA of 1972's geographic jurisdiction, but adoption by statute of an array of new legal mechanisms that would allow the Corps to deal efficiently and effectively with the huge permit load that the §404 program created after the federal courts and the Corps' regulations extended that program to "all waters of the United States" after 1975. Of course, in the FWPCA Amendments of 1977, Congress adopted the latter approach and rejected any "rollback" of FWPCA of 1972 jurisdiction, as discussed by the Court in the *Riverside Bayview Homes* decision.

In the FWPCA Amendments of 1977, Congress added subsections (e) through (t) to FWPCA §404. Many of those new subsections were specifically designed by Congress to solve the serious problems that the Corps had faced in administering the §404 regulatory program in the non-navigable tributaries and their adjacent wetlands during the early 1970s.

For example, the new CWA §404(f) granted statutory exemptions for many hundreds of thousands of small, environmentally insignificant discharges of dredged or fill material caused every year by farming, forestry, ranching, maintenance, construction, and similar activities. Before the §404(f) exemptions became law, each one of those small projects or minor discharges of dredged or fill material theoretically needed an individual §404 permit, complete with "notice and opportunity for public hearings" (as required by FWPCA §404(a)) a NEPA document, a case-specific §404(b)(1) evaluation document, etc. After enactment of the FWPCA Amendments of 1977, all of those small projects or discharges had a statutory exemption from all §404 permitting requirements.

Similarly, the FWPCA Amendments of 1977's new §404(e) for the first time explicitly authorized the Corps to promulgate general permits under §404 on a nationwide, regional, or statewide basis. The Corps soon used that new CWA §404 general permit authority to authorize on average approximately 90,000 small-scale, minimal-impact projects every year. Before §404(e) was enacted in 1977, in theory each one of those small projects required an individual §404 permit, and every one of those individual permits in theory required a public notice, a NEPA document, a §404(b)(1) analysis, etc.

In addition, the 1977 Amendments' new §§404(g) through 404(*l*) for the first time authorized the states to assume §404 permitting and enforcement responsibilities over all waters of the United States other than the traditional navigable waters and wetlands adjacent thereto, including the non-navigable tributaries to the §10 navigable waters. Although to date only Michigan and New Jersey have actually assumed permitting authority under CWA §§404(g) through (*l*), in 1977 Congress expected state assumption to relieve much of the Corps' heavy permit burdens in the non-navigable tributaries of the §10 navigable waters.

Primarily because of the changes to §404 added by the Congress in the FWPCA Amendments of 1977, the Corps was able to reduce the number of individual, standard §404 permit applications that it was legally responsible for processing every year from the theoretical (but entirely imprac-

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98. U.S. Army Corps of Engineers, Permits for Activities in Navigable Waters or Ocean Waters, 38 Fed. Reg. 12217 (May 10, 1973).

99. *Id.* at 12218 (emphasis added).

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tical) level of many hundreds of thousands per year to the vastly reduced level of 8,000 to 12,000 standard, individual permit applications yearly. While that was (and still is) a very large annual workload of individual permits, it was (and still is) manageable, so long as Corps general permits continue to authorize tens of thousands of relatively small projects with minor environmental effects yearly. However, the important point to remember here is that before enactment of the FWPCA Amendments of 1977, the Corps was legally required to accept and process many hundreds of thousands of individual §404 permit applications every year. Obviously, at the time that the Corps promulgated its controversial final rule on April 3, 1974, the Corps was unprepared to deal with such an overwhelming permit load; thus, the Corps' 1974 final rule was in large measure a mechanism to address that very serious difficulty.

Greatly assisted by the amendments to FWPCA §404 that Congress enacted in 1977, the Corps slowly but surely gained control over the massive workload that §404 imposed and eventually learned to implement the §404 regulatory program in "all waters of the United States" effectively, efficiently, and in a manner that balanced the needs for environmental protection against the reasonable expectations of property owners and the regulated public. However, this relatively happy ending to the CWA §404 saga after 1977 could not have been predicted or even imagined by Corps officials during the period from 1972 through 1974. During that period the Corps' leadership could see only the real and imminent likelihood that implementing the new §404 program in "all waters of the United States" would overwhelm the Corps with practical and political problems for which there were no solutions either immediately available or foreseeable. These facts provide the essential background explaining the Corps' final rule of April 3, 1974, which was an unusual, but highly useful, means to address the Corps' very serious practical and political difficulties described above.

The Corps' final rule of April 3, 1974, was preceded by a proposed or "tentative" rule dated May 10, 1973, which had not given any indication that the subsequent, final rule would purport to disavow any of the geographic jurisdiction of §404 of the FWPCA of 1972. The proposed rule of May 10, 1973, which provided "interim guidance" to all Corps field offices, said only the following about FWPCA §404 jurisdiction:

> Section 404 of the Federal Water Pollution Control Act (Public Law 92-500, 86 Stat. 816) authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into the navigable waters . . . .[98]
>
> Definitions . . . . (1) The term "navigable waters of the United States" mean those waters of the United States which are presently, or have been in the past, or may be in the future susceptible for use for purpose of interstate or foreign commerce. See 33 CFR 209-260 (ER 1165-2-302) . . . for more complete definition of this term. (2) *The term "navigable waters" as used in the Federal Water Pollution Control Act (Public Law 92-500, 86 Stat. 816) means the waters of the United States, including the territorial seas.*[99]

It is at least clear from the quotations just provided from the proposed, interim rule of May 10, 1973, that the Corps recognized that the statutory definition that established the geographic jurisdiction for FWPCA §404 was different from the definition of the traditional navigable waters that the Corps had long regulated under §10. Nevertheless, in the Corps' final rule of April 3, 1974, the Corps for the first and only time attempted to define the geographic jurisdiction of its FWPCA §404 program as being limited to the traditional navigable waters regulated under §10.

The Corps' Final Rule of April 3, 1974, Served Multiple Purposes; Among the Most Important Were: (1) to "Buy Time" so That the Corps Could Adapt to and Acquire Regulatory Resources for Its Burgeoning FWPCA §404 Regulatory Responsibilities; and (2) to "Shift the Blame" for Permit Delays and Backlogs to the Federal Courts Once the 1974 Rule Was Overturned as Contrary to the FWPCA of 1972

The historic record contains a number of indications that the Corps' final rule of April 3, 1974, disavowing most of the geographic jurisdiction required by the FWPCA of 1972, was not based on any special knowledge or insights regarding the "true intent" of Congress regarding the jurisdiction of the FWPCA of 1972. In fact, there is considerable evidence that Corps decisionmakers knew that the 1974 final rule was "a stretch," with very weak legal foundations. Moreover, the Corps knew that its 1974 rule would be challenged in the federal courts by environmentalist plaintiffs, and that eventually the federal courts would probably overturn those aspects of the final rule that tried to limit the geographic jurisdiction of §404 to the §10 navigable waters.[100] Nevertheless, the Corps had strong and important reasons for doing what it did in 1974.

First, the Corps' senior attorney, Lankhorst, believed and persuaded the Corps' leadership that a minimally defensible legal case could be made that the Corps had statutory authority to establish a special, more limited geographic jurisdiction for the §404 program; more limited, that is, than EPA had already established for the rest of the FWPCA of 1972. Second, Lankhorst pointed out that even if the Corps' final rule were eventually to be overturned by the courts, at the least the final rule would have provided a colorable legal basis allowing the Corps to implement its new §404 permit responsibilities only in the §10 navigable waters for so long as it would take the environmentalists to bring a lawsuit and for the federal courts to overturn the 1974 final rule, a process that could easily take years. In this way the Corps' 1974 final rule would "buy time" while the Corps and its allies in the regulated public (especially industry groups) sought

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[100] Corps leaders knew that environmentalists would certainly challenge the legality of the final rule of April 3, 1974, because that rule had declined to assert CWA jurisdiction over non-navigable tributaries to the §10 navigable waters, and over most wetlands adjacent to both navigable and non-navigable waters. One of the greatest environmental problems presented by the Corps' attempt in 1974 to exclude non-navigable tributaries from the jurisdiction of the §404 program was that the rule would have removed the protections of CWA §404 regulation from all wetlands adjacent to all non-navigable tributaries, thereby providing no federal protection for the water quality and flood control benefits that those wetlands provide for downstream waters. The Corps' 1974 final rule did not even assert CWA §404 jurisdiction over most wetlands adjacent to the §10 navigable waters. It is true that some wetlands adjacent to §10 navigable waters were already regulated under §10 of the Rivers and Harbors Act, i.e., wetlands lying below the mean high tide line in tidal §10 waters, and wetlands lying below the ordinary high watermark for nontidal §10 waters.

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congressional relief, or while the Corps found practical administrative ways to handle the overwhelming new regulatory responsibilities that §404 would create if and when extended to all non-navigable tributaries and to all adjacent wetlands. Third, the Corps' 1974 final rule and the inevitable litigation that would soon challenge it would establish clearly on the record that the Corps was willing to expand the §404 regulatory program beyond the §10 navigable waters only if and when the federal courts ordered the Corps to do so. This would allow the Corps to deflect "blame" for the resulting regulatory backlogs and burdens away from the Corps and onto the federal courts. Fourth, the Corps could gamble on the remote possibility that the federal courts might conceivably defer to the Corps' final rule and uphold it as a legally permissible way for the Corps to implement FWPCA §404 only in the §10 navigable waters, even if the rest of the FWPCA of 1972 did have a much greater geographic scope, as implemented by EPA and the states. Viewed from the Corps' perspective in 1974, the final rule of April 3, 1974, was a "no lose" proposition, even if it did not reflect "the true intent of Congress" regarding the full geographic scope of the FWPCA of 1972, and even if the prospects for having that rule upheld by the federal courts seemed highly improbable.

Taking the Corps' final rule of April 3, 1974, at face value, it is remarkable that, read carefully, the only explanation that the Corps provided in the *Federal Register* to justify the final rule's highly controversial assertion that FWPCA §404's jurisdiction was identical to §10's limited jurisdiction, was completely incredible, and not nearly as persuasive as the Corps presumably could have made it. In fact, no competent lawyer who was familiar with federal law regarding navigable and non-navigable waters in 1974 could possibly have believed or taken seriously the only justification that the Corps provided in the *Federal Register* of April 3, 1974, for that rule's attempt to disown most of the geographic jurisdiction of the FWPCA of 1972 for purposes of the §404 program. The following implausible preamble statements are especially noteworthy, given that in 1974 the Corps knew that its final rule was radically at odds with the earlier EPA determinations and regulations regarding FWPCA jurisdiction, and that the Corps knew that its repudiation of the full jurisdictional scope of the FWPCA of 1972 would be immediately challenged in the federal courts:

> Several comments and questions were received concerning the different definitions which were assigned to the terms "navigable waters of the United States" and "navigable waters." In this regard, it is noted that the Corps regulatory authority under the River and Harbors Act of 1899 (33 U.S.C. 401 et seq.) speaks in terms of "navigable waters of the United States." This term has received the benefit of over 100 years of judicial definition and interpretation *which has largely been based on the constitutional extent to which the authority of the United States can extend over the nation's waterways*. . . . Section 404 of the FWPCA uses the term "navigable waters" which is later defined in the Act as "the waters of the United States." The Conference Report, in discussing this term, advises that this term is to be given the "broadest possible Constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes." We feel that the guidance in interpreting the meaning of this term which has been offered by this Conference Report—to give it the broadest possible Constitutional interpretation—is the same as the basic premise from which the aforementioned judicial precedents have evolved. *The extent of Federal regulatory jurisdiction must be limited to that which is Constitutionally permissible*, and in this regard, we feel that we must adopt an administrative definition of this term which is soundly based on this premise and the judicial precedents which have reinforced it. Accordingly, we feel that in the administration of this regulatory program both terms should be treated synonymously.[101]

As the emphasized portions from the preamble state, the only justification that the Corps saw fit to provide for its assertion on April 3, 1974, that the geographic jurisdiction of the FWPCA §404 was limited to the §10 navigable waters was the notion that the *Constitution did not allow* the federal government to regulate any area outside the narrow limits of the §10 navigable waters of the United States. Thus the Corps' 1974 preamble essentially states that if the Corps were to attempt to regulate any activity beyond the narrow limits of the §10 navigable waters, that would be not only beyond the Corps' statutory authority, but unconstitutional. If that were true, then it would be equally true that if Congress by legislation were to assert federal regulatory powers outside the §10 navigable waters, or if any agency of the executive branch were to exercise federal regulatory powers outside the limits of the §10 navigable waters, that would be equally unconstitutional. If constitutional law assertions as retrograde and restrictive as those made in the Corps' 1974 preamble had been made early in the 1800s, some competent lawyers of the "states' rights persuasion" at that time might have agreed with it. But nothing is more certain than that the Corps' attorneys in 1974 who wrote the preamble language quoted above could not possibly have believed such a proposition, or even have expected it to be taken seriously by any federal court.[102] The obvious reason is that by 1974 numerous decisions of the Court and of the federal

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[101] 39 Fed. Reg. at 12115 (emphasis added).

[102] The preamble to the Corps' final rule of April 3, 1974, was written by Lankhorst, with the assistance of Hedeman. (*See* Appendix 2.)

[103] 174 U.S. 690 (1899).

[104] 363 U.S. 229 (1960).

[105] *See* 33 U.S.C. §407.

[106] *See* 16 U.S.C. §817.

[107] *See, e.g.*, Georgia Power Co. v. Federal Power Comm'n, 152 F.2d 908 (5th Cir. 1946); Union Elec. Co. v. Federal Power Comm'n, 326 F.2d 535 (8th Cir. 1964), *rev'd on other grounds*, 381 U.S. 90 (1965); Nantahala Power Co. v. Federal Power Comm'n, 384 F.2d 200 (4th Cir. 1967), *cert. denied*, 390 U.S. 945 (1968); United States v. Appalachian Elec. Power Co., 107 F.2d 769 (4th Cir. 1939), *rev'd on other grounds*, 311 U.S. 377 (1940); *see also* 36 Op. Att'y Gen. 355 (1930).

[108] See the discussion in Appendix 2.

[109] It is also noteworthy that a number of more superficially persuasive arguments were available to the Corps in 1974 that the Corps could have put into its preamble to try to justify a separate, more restricted geographic jurisdiction for the FWPCA §404 program than the full FWPCA jurisdiction that EPA had previously asserted administratively for the rest of the FWPCA of 1972. For example, unlike many liquid or highly soluble pollutants that obviously would flow downstream from tributaries to pollute the navigable waters, most fill material discharged into non-navigable tributaries consists primarily of solids, most of which would remain in place at the point of discharge, thus arguably presenting less danger of toxic pollutants flowing downstream than liquid pollutants would present. Of course, much dredged material consists of liquids, slurry, and mixture of solids and water, much of which can wash downstream with the current.

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courts of appeals, many well-known federal statutes enacted by Congress, and numerous executive branch regulations published in the *Code of Federal Regulations*, some of them written and enforced by the Corps itself, had established beyond any question that the Constitution did allow the federal government to regulate all manner of non-navigable tributary streams and waterways, as well as land areas, actions, activities, etc., lying beyond the narrow limits of the §10 navigable waters of the United States.

For example, the Corps' lawyers who wrote the preamble language quoted above were quite familiar with the Court decision in *United States v. Rio Grande Irrigation Co.*,[103] in which the Court upheld the authority of Congress to assert regulatory control over non-navigable tributaries to the traditional navigable waters. Corps lawyers were also familiar with the Court's decision in *United States v. Grand River Dam Authority*,[104] in which the Court upheld the authority of Congress to control and alter non-navigable tributaries to navigable waters, and in which the Court even applied the "no compensation rule" of the federal navigation servitude to Corps of Engineers actions that degraded such non-navigable tributaries in the course of building a Corps Civil Works navigation project. Such Court decisions provided the very foundation of many Corps Civil Works activities and were very familiar to all of the Corps' senior attorneys, especially those attorneys who wrote the preamble to the Corps' 1974 final rule.

In addition, as discussed earlier, the same Corps attorneys who wrote the preamble to the Corps' final rule of April 3, 1974, had been actively involved in implementing a large-scale regulatory program over polluting discharges in non-navigable tributaries to navigable waters pursuant to the Refuse Act, §13 of the Rivers and Harbors Act of 1899, an important Corps statutory authority that had explicitly asserted federal regulatory jurisdiction over non-navigable tributaries since 1899. Those same Corps attorneys also knew of and enforced the provision of the Refuse Act that asserted federal regulatory authority over "the *bank* of any navigable water" and over "*the bank of any tributary of any navigable water*."[105] If it would have been unconstitutional for the federal government to assert regulatory authority outside the limits of §10 navigable waters pursuant to the FWPCA of 1972, as stated in the Corps' final rule preamble of April 3, 1974, then *a fortiori* it would have been unconstitutional for the Corps to exercise federal regulatory authority over the *banks* of navigable waters and over the *banks of non-navigable tributaries* under the Refuse Act; yet the Corps had been exercising such authority ever since 1899 without a qualm.

The Corps also knew of and helped to implement the federal government's explicit statutory assertion of regulatory authority over non-navigable tributaries to the navigable waters that was made by §23(b) of the Federal Power Act of 1920.[106] Corps attorneys also well understood that the Federal Power Act's assertion of federal regulatory jurisdiction over non-navigable tributaries had been upheld as constitutional by the federal courts.[107]

In summary, the one and only justification that the Corps provided in its preamble of April 3, 1974, to explain its disavowal of most of the geographic jurisdiction of FWPCA §404 was actually constitutional law nonsense that the highly competent and knowledgeable Corps attorneys who wrote that preamble in 1974 could not possibly have believed or taken seriously.[108] These facts suggest that the Corps' final rule of April 3, 1974, was not really a legitimate, serious rule that the Corps expected the federal courts to uphold.[109]

Just as the Corps expected,[110] the final rule of April 3, 1974, was soon challenged in the federal courts by environmental groups. And, just as the Corps must have anticipated, on March 27, 1975, the U.S. District Court for the District of Columbia held in *Natural Resources Defense Council, Inc. v. Callaway*[111] that the Corps had "acted unlawfully and in derogation of their responsibilities under [§]404 of the Water Act by the adoption of (the final rule of) April 3, 1974 . . . ."[112] The district court then ordered the Corps to:

> 1. Revoke and rescind so much of 39 *Federal Register* 12115, et seq., (April 3, 1974) as limits the permit jurisdiction of the Corps of Engineers by definition or otherwise to other than "the waters of the United States."
>
> 2. Publish within fifteen (15) days of the date of this order proposed regulations clearly recognizing the full regulatory mandate of the Water Act . . . .[113]

Presumably, the order was not accompanied by a detailed opinion precisely because the court considered its result to be entirely obvious.

If the Corps and the Army had actually believed the assertions made in the preamble to the Corps' final rule of April 3, 1974, i.e., that it would be not only unauthorized by statute, but unconstitutional, for the Corps to implement FWPCA §404 beyond the limits of the §10 navigable waters, then surely, after the Corps had received the order that it rescind its final rule of April 4, 1974, and replace it with a new rulemaking extending the geographic jurisdiction of the FWPCA §404 program to all "waters of the United States," the Corps and the Army would have had an absolute obligation to urge the U.S. Department of Justice (DOJ) to appeal the district court's decision to the court of appeals, and to the Court, if necessary. Such an appeal would have been essential to vindicate the Corps, the Army, the law, and the Constitution. Significantly, the Army made the decision

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Moreover, contaminants and toxic pollutants found in either dredged or fill material can enter the water column at the time of discharge, or later can leach into the waters of tributary streams, and then move downstream to pollute the navigable waters. One purpose of the §404 permit program is to ensure that both dredged material and fill material discharged into any waters of the United States will not contain toxic pollutants in potentially harmful amounts. Nevertheless, in 1974 the Corps could have tried to make the case that §404 pollutants were different from §402 pollutants, thus allegedly justifying a reduced geographic jurisdiction for FWPCA §404. The omission of any such superficially persuasive arguments in the preamble of the 1974 final rule is further evidence that in 1974 the Corps was going through a somewhat disingenuous, but (from the Corps' perspective) politically and practically necessary exercise when it promulgated the final rule of April 3, 1974, purporting to disavow most of its FWPCA §404 geographic jurisdiction.

[110] *See* Appendix 2.

[111] 392 F. Supp. 685, 5 ELR 20285 (D.D.C. 1975).

[112] *Id.* at 686.

[113] *Id.*

[114] 504 F.2d 1317, 4 ELR 20784 (6th Cir. 1974).

[115] 373 F. Supp. 665, 4 ELR 20710 (M.D. Fla. 1974).

[116] 403 F. Supp. 1292, 5 ELR 20039 (N.D. Cal. 1974).

[117] U.S. Army Corps of Engineers, Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. 19766 (May 6, 1975).

[118] *Id.*

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about appealing the *Callaway* decision and did *not* request that the DOJ appeal the district court's decision, even to the court of appeals level, much less to the Court. Instead, the Army accepted the decision as legally correct and instructed the Corps to set about the work of implementing it. That fact provides further evidence that the Corps' final rule of April 3, 1974, was little more than a "straw man" that the Corps in large measure expected the federal courts to overturn. The historic record cited below provides significant evidence regarding why the Corps had promulgated the final rule of April 3, 1974, in the first place, even though the Corps expected that the federal courts would probably overturn it, and also regarding the benefits that the Corps derived from the final rule even though the courts did strike it down.

The most obvious explanation for the Corps' April 2, 1974, attempt to disavow the broad, extended geographic jurisdiction of the FWPCA of 1972 §404 program is apparent from the Corps' lengthy explanation of its conduct in the preamble to its proposed rule of May 6, 1975, in which the Corps began to implement the district court's order of March 27, 1975. In that preamble the Corps did not really offer any justification or defense for the position that it had taken in its final rule of April 4, 1974, but the Corps did explain at length that it was now extending FWPCA §404 jurisdiction far beyond the navigable waters *because the federal courts had forced it to do so*. The Corps' preamble of May 6, 1975, discussed at length the order of the district court in the *Callaway* case, and also cited the decisions of the Fifth Circuit in *United States v. Ashland Oil & Transportation Co.*,[114] and the U.S. district court decisions in *United States v. Holland*[115] and *Leslie Salt Co. v. Froehlke*[116] as further evidence that the federal courts, not the Corps, were requiring this great expansion of jurisdiction under the FWPCA of 1972.[117] The Corps emphasized its inability to resist further by stating in the preamble: "Since the Department of the Army's present definition of this term ('the waters of the United States') has been judicially overruled, a broader definition of this term to include waters beyond those which fall within the traditional definition of 'navigable waters of the United States' is required."[118] Given the fact that the Corps and the Army had not insisted on an appeal of the *Callaway* decision to even the court of appeals level, the Corps' preamble of May 6, 1975, provides confirmatory evidence supporting the following explanation for the Corps' final rule of April 3, 1974: the Corps was not willing to accept the political costs, criticisms, and difficulties inherent in extending its FWPCA §404 jurisdiction without the "cover" of being able to blame it all on the federal courts. Because the Corps and the Army recognized that the district court's decision in *Callaway* was correct as a matter of law and would necessarily be upheld if it were to be appealed, the Corps and the Army accepted the district court's decision as sufficient "cover" to allow the Corps to do what it knew it had to do. Of course, the Corps could have chosen in its preamble to blame its difficult situation on Congress' enactment of the FWPCA of 1972 rather than on the federal courts that enforced the mandates of that statute. However, such a complaint could have been construed as a criticism of Congress itself, and the Corps would not criticize publicly the source of all of its funding, authorities, and very existence. Thus, the federal courts were the "scapegoat of choice."

In addition to providing the Corps with necessary "political cover," the Corps' final rule of April 4, 1974, successfully served its other primary purpose in that it bought the Corps three years and three months of respite before the Corps finally asserted jurisdiction over all of the waters of the United States covered by the FWPCA of 1972. Following the issuance of the final rule of April 3, 1974, there was almost one full year of delay before that rule was overturned judicially on March 27, 1975, and more than a year before the Corps even began to expand the full FWPCA of 1972 jurisdiction by means of the Corps' proposed rule of May 6, 1975.

The slow, deliberate "phase-in" period adopted by the Corps to implement the FWPCA of 1972's full geographic jurisdiction provided substantially more time for the Corps and the regulated public to prepare for and implement the expansion of FWPCA's geographic jurisdiction. The Corps announced the "phase-in" plan in its interim final regulations published on July 25, 1975.[119] As amended later on December 21, 1976, the Corps expanded its FWPCA §404 jurisdiction in three phases.[120] As of July 25, 1975, the Corps asserted FWPCA jurisdiction only over the §10 navigable waters and their adjacent wetlands. The Corps did not expand §404 jurisdiction to lakes and to the primary tributaries of the §10 navigable waters and their adjacent wetlands until July 1, 1976. The Corps did not expand §404 jurisdiction to all other tributaries of the §10 navigable waters and to other water bodies until July 1, 1977. Consequently, the Corps' final rule of April 3, 1974, its review by the federal courts, and the aftermath of that litigation actually bought the Corps three years and three months of valuable time before the Corps implemented the FWPCA of 1972's full geographic jurisdiction in July of 1977.[121] The Corps used that period of respite to consider and plan how it would deal with and implement an expansion of FWPCA of 1972 §404 jurisdiction beyond the §10 navigable waters. Most importantly, the Corps' plans and efforts, implemented quietly and effectively between 1975 and 1977, were instrumental in convincing Congress to provide extensive statutory relief to the Corps through the FWPCA Amendments of 1977, as described above. The details of that story are not really relevant to this Article, but many of those details can be found in the full legislative history of the FWPCA Amendments of 1977.

In summary, the Corps' final rule of April 3, 1974, decidedly was *not* an earnest, legitimate attempt by the Corps to discern and implement the "true intent" of Congress regarding the geographic jurisdiction of the FWPCA of 1972, as was asserted by the Albrecht/Nickelsburg Article, and as one might infer from the Court's dicta in *SWANCC*. The

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[119] *See* U.S. Army Corps of Engineers, Permits for Activities in Navigable Waters or Ocean Waters, 40 Fed. Reg. 31322 (July 25, 1975).

[120] *See* U.S. Army Corps of Engineers, 41 Fed. Reg. 55524 (Dec. 21, 1976).

[121] The difficulties presented by the Corps' multi-year "phase-in" of CWA jurisdiction, and the costs to aquatic resources caused by the time delay in asserting CWA jurisdiction, are reflected in the circumstances described in *United States v. Byrd*, 609 F.2d 1204, 9 ELR 20757 (7th Cir. 1979).

[122] *See* 474 U.S. at 134 (concluding that "a definition of 'waters of the United States' encompassing all wetlands adjacent to other bodies of water over which the Corps has jurisdiction is a permissible interpretation of the Act").

[123] 33 U.S.C. §1251(a).

[124] *See* Albrecht & Nickelsburg, *supra* note 1, at 11056.

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practical and political considerations that in large measure motivated the Corps to promulgate its final rule of April 3, 1974, tend to refute, rather than support, the assertions about the jurisdiction of both the FWPCA of 1972 and of the current CWA that the Albrecht/Nickelsburg Article made based on that Corps 1974 final rule.

Both the Text and the Legislative History of the FWPCA Amendments of 1977 Confirm the Fact That EPA and the Corps, by APA Rulemakings Between 1972 and 1977, Properly Construed the Jurisdiction of the FWPCA of 1972 to Include Non-Navigable Tributaries

Because the Albrecht/Nickelsburg Article erroneously concluded that the FWPCA of 1972 did not assert jurisdiction over any aquatic area outside the §10 navigable waters, that Article also suggests that EPA and Corps regulations promulgated between 1972 and 1977 were all contrary to law and unauthorized (except, of course, for the Corps' final rule of April 3, 1974), because those regulations asserted jurisdiction over non-navigable tributaries under the authority of the FWPCA of 1972. In fact, the Court unanimously upheld most, if not all, of the substance of those EPA and Corps regulations as reasonable and legally authorized in *Riverside Bayview Homes.* In that decision, the Court unanimously upheld as reasonable and consistent with the FWPCA of 1972 the legal, scientific, and practical foundations of EPA and Corps regulations, finding reasonable those regulations that asserted FWPCA jurisdiction over "adjacent wetlands" outside the §10 navigable waters because "adjacent wetlands are inseparably bound up with the 'waters' of the United States."[122] Without such regulation, it would be impossible for the CWA "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[123] If EPA and Corps of Engineers APA rulemakings, and the unanimous Court in the *Riverside Bayview Homes* decision, concluded that wetlands adjacent to other waters of the United States are subject to CWA jurisdiction because they are "inseparably bound up with" those waters, then *a fortiori* those same regulations' assertion of CWA jurisdiction over all of the tributaries to those waters are subject to CWA jurisdiction for the same reason.

Of course, Albrecht and Nickelsburg would limit the *Riverside Bayview Homes* decision to its facts and ignore all of its reasoning. Thus, it is hardly surprising that the Albrecht/Nickelsburg Article also gave a cramped interpretation of the FWPCA Amendments of 1977. The Albrecht/Nickelsburg Article (supported by the Fifth Circuit's *Needham* and *Rice* dicta) would deny that CWA jurisdiction exists even today over any aquatic area outside the §10 navigable waters, including over any non-navigable tributary,

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[125] 392 F. Supp. at 685.

[126] *See* 474 U.S. at 135-39.

[127] *See* CWA §404(g), 33 U.S.C. §1344(g). Subsection 404(g) authorized states to assume §404 permitting responsibilities for only one small subcategory of the §10 waters, i.e., those nontidal water bodies that are not presently navigable-in-fact or susceptible to being made navigable with reasonable improvements, but that were historically navigable.

[128] If the Albrecht/Nickelsburg assertions were correct, then a state could assume CWA §404 responsibilities only for "historic use only" nontidal streams. However, if one were to agree with other assertions of Albrecht/Nickelsburg and similar assertions of the Fifth Circuit's dicta in *Rice* and *Needham*, there would be hardly any "historic use only" nontidal streams remaining under CWA jurisdiction, and possibly none at all, thereby turning CWA subsections (g) through (*l*) into a complete nullity.

[129] 531 U.S. at 171.

[130] Appendix 1 offers some relevant quotations from these recent appellate decisions.

[131] 332 F.3d 698, 33 ELR 20223 (4th Cir. 2003).

[132] 344 F.3d 407 (4th Cir. 2003).

[133] 339 F.3d 447, 33 ELR 20249 (6th Cir. 2003).

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unless some unknown legal authority can document the existence of such "federal jurisdiction . . . by the statute's clear text or by evidence of clear congressional intent."[124]

The Albrecht/Nickelsburg Article strongly implies that no one has ever discovered any "clear text" in the CWA statute or any other "evidence of clear congressional intent" that would convince those authors that the CWA has jurisdiction over non-navigable tributaries or their adjacent wetlands. One can safely infer from their Article that Albrecht and Nickelsburg believe that no such evidence can be found in either the text or the legislative history of the FWPCA Amendments of 1977; they surely point to none. Because this Article has refuted the essential premises of the Albrecht/Nickelsburg piece, all of which were based on their erroneous assertions about the FWPCA of 1972, this Article will not attempt to present a comprehensive review of the FWPCA Amendments of 1977. Nonetheless, even a cursory consideration of the FWPCA Amendments of 1977 indicates that, once again, Albrecht and Nickelsburg "got it wrong."

To whatever extent the terms and legislative history of the FWPCA Amendments of 1972 were ambiguous regarding the extent of the CWA's geographic jurisdiction, those doubts were in large measure removed when significant amendments to the FWPCA of 1972 were proposed, debated, and enacted in 1977. The Court's decision in *Riverside Bayview Homes* cites and relies on the legislative history of the FWPCA Amendments of 1977 as confirming the reasonableness and legality of EPA and Corps regulations that had construed the jurisdiction of the FWPCA of 1972 as extending far beyond the §10 navigable waters. In contrast, the Albrecht/Nickelsburg Article asserts that the 1977 Amendments may have changed the jurisdiction of the FWPCA of 1972, but expanded it only to cover some wetlands actually adjoining open water areas of the §10 navigable waters. In fact, the FWPCA Amendments of 1977 and their legislative history demonstrate that Congress understood, acquiesced in, and confirmed most, if not all, of EPA and Corps regulations that had asserted FWPCA of 1972 jurisdiction far beyond the traditional navigable waters, including all non-navigable tributaries and their adjacent wetlands.

In 1977 Congress revisited the entire question of FWPCA geographic jurisdiction, largely because the vast expansion of jurisdiction undertaken by the Corps under the authority of the FWPCA of 1972 to comply with the U.S. district court's decision in *Callaway*[125] had caused much political controversy. After a long and spirited debate, Congress rejected legislative efforts to roll back FWPCA jurisdiction to the traditional navigable waters and their adjacent wetlands and instead enacted the FWPCA Amendments of 1977, commonly known as the CWA. Both the text and the legislative history of the 1977 Amendments demonstrate that in 1977 Congress accepted and confirmed EPA and Corps regulations that had implemented the full extent of CWA geographic jurisdiction mandated by the *Callaway* decision. That 1977 legislative history is cited and relied on by the Court in the *Riverside Bayview Homes* decision[126] but is given short shrift in the Albrecht/Nickelsburg Article.

The text of the 1977 Amendments to CWA §404 does provide some evidence that the Albrecht/Nickelsburg suggestion that non-navigable tributaries are not (and never were) subject to FWPCA jurisdiction is wrong. While Congress refused in 1977 to enact proposed CWA amendments that would have rolled back FWPCA jurisdiction to the traditional navigable waters and their adjacent wetlands, Congress did for the first time in 1977 authorize the states to assume part of the controversial §404 regulatory program when Congress added subsections (g) through (*l*) to §404. The legislative history of those new subsections indicates that Congress expected interested states to assume §404 permitting responsibilities for the large number of non-navigable water bodies, such as non-navigable tributaries, that Congress had been debating in terms of the rejected legislative proposals for reducing FWPCA of 1972 jurisdiction. However, Congress explicitly refused to authorize states to assume §404 responsibilities for almost all of the §10 navigable waters or for wetlands adjacent to those §10 navigable waters.[127] If the Albrecht/Nickelsburg Article were correct

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134. 243 F.3d 526, 31 ELR 20535 (9th Cir. 2001).

135. 305 F.3d 943, 33 ELR 20048 (9th Cir. 2002).

136. 303 F.3d 784, 33 ELR 20035 (7th Cir. 2002).

137. *See* Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," 68 Fed. Reg. 1991 (Jan. 15, 2003).

138. In mid-December 2003, EPA and the Army announced that they had no current plans to undertake such a rulemaking. Nevertheless, the agencies obviously have full legal authority to revive plans for a rulemaking on CWA jurisdiction at any time.

139. 33 U.S.C. §1251(a).

140. Of course, that conclusion introduces legal, scientific, practical, and policy questions regarding what constitutes the "total tributary system" of the navigable waters that the CWA should have jurisdiction over if that Act is to protect "the waters of the United States" from all kinds of potentially harmful polluting discharges. Undoubtedly there are difficult and unanswered questions regarding what are the upper limits of the tributary system regulated by the CWA. To date neither the federal courts nor agencies responsible for implementing the CWA have provided answers for all of those questions, and this author will not attempt to do so in this Article.

Nevertheless, the analysis presented in this Article leads to at least one basic legal principle for determining what constitutes the "core" or minimal tributary system subject to CWA jurisdiction, as follows: the CWA at the least should have jurisdiction over every aquatic area, e.g., stream, watercourse, wetland, etc., if a pollutant, e.g., oil wastes, toxic chemical wastes, discharged into that aquatic area could be reasonably expected to migrate, e.g., flow, percolate, etc., from or through that aquatic area into §10 navigable waters under reasonably predictable hydrologic conditions, i.e., rainfall, runoff, predictable flooding events, etc. Any type of watercourse that connects with and could transport pollutants into the navigable waters would qualify as subject to CWA jurisdiction under this legal test, whether that watercourse is a man-made ditch or a natural stream, and regardless of whether the watercourse flows through culverts or other pipes for part of its length. Any wetland area that is adjacent to, i.e., bordering, contiguous to, or neighboring, such a watercourse, and any wetland that is otherwise hydrologically connected to such a watercourse, also would be subject to CWA jurisdiction under this test. (See the full definition of "adjacent" at 33 C.F.R. §328.3(c).) If all hydrologically connected wetland areas were not subject to CWA jurisdiction, then pollutants discharged into such wetlands would migrate into the navigable waters, and the unregulated destruction of such wetlands would eliminate their functions of filtering out pollutants, storing floodwaters, etc.

In some (though not all) circumstances the basic test for CWA jurisdiction described above can be established by a simple "dye test," whereby a dye is discharged into the aquatic area in question to observe whether that dye will migrate into the tributary system of the §10 navigable waters within some reasonable period of time. Of course, a dye test would not be an adequate or determinative test at all times or in all circumstances. For example, many watercourses in arid regions of the southwestern United States are dry during most of the year and are dry all year long during periods of extreme drought, but become torrential streams after rainfall events. Dye (or toxic chemical wastes) discharged into such dry watercourses might re-

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in its assertion that CWA jurisdiction covers very few (if any) water bodies that are not §10 navigable waters, then there would be hardly any waters subject to CWA jurisdiction that the states could assume CWA §404 permitting responsibility for, and CWA §404(g) through (*l*) would be almost a meaningless nullity.[128]

Predictably, the Albrecht/Nickelsburg Article treats the Court's *SWANCC* decision as if every word therein were holy writ. So it is curious that those authors do not mention the one explicit reference that the *SWANCC* decision makes to non-navigable tributaries. While discussing the significance of §404(g)'s expression "other . . . waters," the *SWANCC* majority opinion states that "it is also plausible, as petitioner contends, that Congress simply wanted to include [within CWA jurisdictional waters that states could assume §404 permitting responsibility for] all waters adjacent to 'navigable waters,' such as non-navigable tributaries and streams."[129] Thus Albrecht and Nickelsburg's favorite and ultimate legal authority, the *SWANCC* decision, itself provides some *obiter dicta* tending to refute those authors' suggestion that the CWA has no jurisdiction over non-navigable tributaries and their adjacent wetlands.

Conclusion

Since the time that I began researching and writing this Article several months ago, the U.S. Court of Appeals for the Fourth Circuit and the U.S. Court of Appeals for the Sixth Circuit, have handed down decisions regarding the post-*SWANCC* geographic jurisdiction of the CWA.[130] In *United States v. Deaton*,[131] *United States v. Newdunn Associates*,[132] and *United States v. Rapanos*,[133] the courts rejected the assertions and "evidence" that the Albrecht/Nickelsburg Article presented for the use of the federal courts, urging the courts to roll back CWA jurisdiction to the §10 navigable waters, or at least to restrict CWA jurisdiction to very narrow limits. Those three courts of appeals decisions are in full agreement with the decisions of the U.S. Court of Appeals for the Ninth Circuit in *Headwaters, Inc. v. Talent Irrigation District*[134] and *Community Ass'n for the Restoration of the Environment v. Henry Bosma Dairy*,[135] and with a similar decision of the U.S. Court of Appeals for the Seventh Circuit in *United States v. Krilich.*[136] As of the time this Article was completed in December 2003, all four of the courts of appeals that have directly addressed the question of post-*SWANCC* CWA jurisdiction have agreed, without the filing of a single dissenting opinion, that the *SWANCC* decision's holding was narrow, and that the entire tributary system of the §10 navigable waters is still subject to the important protections of the CWA.

Nevertheless, the *obiter dicta* from the Fifth Circuit's decisions in *Rice* and *Needham*, and the similar holdings of several U.S. district court decisions noted above, demonstrate that the post-*SWANCC* jurisdiction of the CWA is far from being a settled matter. Over the next several years many different federal courts presumably will rule on this important issue, and eventually the Court will probably have to address the matter. In addition, throughout 2003 EPA and the Army have been amassing and analyzing a public record from an "Advanced Notice of Proposed Rulemaking on the CWA Regulatory Definition of 'Waters of the United States.'"[137] Such a rulemaking, should it ever occur, would be intended to clarify the limits of post-*SWANCC* CWA jurisdiction.[138]

I hope that this Article has at least demonstrated that the radical analysis and conclusions presented by the Albrecht/Nickelsburg Article are fallacious and unworthy of acceptance by any federal court or knowledgeable legal practitioner. Contrary to the assertions of the Albrecht/Nickelsburg Article, the legislative history of the FWPCA of 1972, and both the text and the legislative history of the FWPCA Amendments of 1977, indicate that Congress intended that the CWA's geographic jurisdiction should encompass the tributaries to the §10 navigable waters. The CWA could not possibly fulfill its purposes and goals unless all of those tributaries are part of the CWA's jurisdiction because pollution discharged into the tributaries will inevitably flow downstream to pollute the larger §10 navigable waters. The alleged "legislative history" of the FWPCA of 1972 presented and relied on in the Albrecht/Nickelsburg Article was misleading to a marked degree. In fact, the Albrecht/Nickelsburg Article really provided no reliable support for that Article's extreme assertion that the CWA does not have and never has had jurisdiction over more than 99% of the full tributary system of §10 navigable waters. The most superficially credible argument presented by the Albrecht/Nickelsburg Article is based on the Corps' final rule of April 4, 1974. Yet when the Corps' 1974 final rule is analyzed carefully in light of the full historic record regarding how the Corps struggled with its new CWA §404 responsibilities during the 1972 through 1977 period, that 1974 final rule provides no substantial support for the Albrecht/Nickelsburg Article's conclusions.

The legal and policy debate regarding what is left of the

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main at the discharge site for weeks or months, but would be carried downstream after the next heavy rain. The federal courts have determined that such dry watercourses are waters of the United States if they serve as tributaries to navigable waters after rainfall events. *See, e.g.*, United States v. Texas Pipe Line Co., 611 F.2d 345, 10 ELR 20184 (10th Cir. 1979); Quivera Mining v. EPA, 765 F.2d 126, 130, 15 ELR 20530 (10th Cir. 1985); United States v. Phelps Dodge, 391 F. Supp. 1181, 1187, 5 ELR 20308 (D. Ariz. 1975).

There may be other appropriate bases and legal tests for asserting CWA jurisdiction over various types of aquatic areas, but I believe the legal principle summarized above is the essential principle that has been adopted thus far by the Fourth, Sixth, Seventh, and Ninth Circuits in the decisions cited a number of times in this Article. Appendix 1 offers some relevant quotations from recent court of appeals decisions.

It should be noted that, notwithstanding some inaccurate dicta to the contrary in the Fifth Circuit's *Needham* decision, so far as I know no federal agency or court has ever asserted CWA jurisdiction over any "mud puddle" or "sewer." By definition no mud puddle would have sufficient permanence in the landscape to qualify as a wetland or other water body. Moreover, every isolated "mud puddle" would be outside CWA jurisdiction under the *SWANCC* decision's holding in any event. I know of no federal agency or court that has ever asserted CWA jurisdiction over a sanitary sewer. One case that could possibly be read to assert CWA jurisdiction over part of a storm sewer system might be *United States v. Eidson*, 108 F.3d 1336, 27 ELR 20853 (11th Cir. 1997), but even that is uncertain.

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1. United States v. Deaton, 332 F.3d 698, 33 ELR 20223 (4th Cir. 2003).
2. *Id.* at 707.
3. *Id.* at 712.
4. 339 F.3d 447, 33 ELR 20249 (6th Cir. Aug. 5, 2003).
5. *Id.* at 453.
6. 344 F.3d 407, 2003 WL 22093616 (4th Cir. 2003).
7. *Id.* at *8.

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CWA's geographic jurisdiction after the Court's *SWANCC* decision is of first-class importance. The health and well-being of our nations's waters, environment, and people depend on the outcome of that debate. If that debate is to produce reasonable and responsible decisions from the federal courts, future federal agency rulemakings, and (potentially) future congressional enactments, legal practitioners contributing to that debate should try to rise above result-oriented advocacy that misrepresents either the legislative history or the current jurisdiction of the CWA.

As they deal with questions relating to the CWA's jurisdiction, the federal courts and agencies should be guided by an objective view of the CWA, its actual legislative history, and the Act's fundamental purposes of protecting the nation's waters from pollution. Those vitally important purposes were expressed in the CWA's stated objective: "[T]o restore and maintain the chemical, physical, and biological integrity of the nation's waters."[139] The federal courts and administrative agencies can best implement the intent of Congress expressed in the CWA by recognizing the fact that the CWA has, and has had since its enactment in 1972, jurisdiction over the total tributary system of §10 navigable waters.[140]

APPENDIX 1: Important Legal Principles Regarding CWA Jurisdiction Adopted in Recent U.S. Circuit Court of Appeals Decisions

The following two quotations are from *United States v. Deaton*[1]:

> The power over navigable waters also carries with it the authority to regulate nonnavigable waters when that regulation is necessary to achieve Congressional goals in protecting navigable waters. Any pollutant or fill material that degrades water quality in a tributary of navigable waters has the potential to move downstream and degrade the quality of the navigable waters themselves. . . .[2]
>
> . . .
>
> In *Riverside Bayview* the Supreme Court concluded that the Corps regulation extending jurisdiction to adjacent wetlands was a reasonable interpretation in part because of what *SWANCC* described as "the significant nexus between the wetlands and 'navigable waters.'" There is also a nexus between a navigable waterway and its nonnavigable tributaries. The Corps argues, with supporting evidence, that discharges into nonnavigable tributaries and adjacent wetlands have a substantial effect on water quality in navigable waters. The Deatons do not suggest that this effect is overstated. This nexus, in light of the "breadth of congressional concern for protection of water quality in aquatic ecosystems," is sufficient to allow the Corps to determine reasonably that its jurisdiction over the whole tributary system of any navigable waterway is warranted. The regulation, as the Corps reads it, reflects a reasonable interpretation of the Clean Water Act. The Act thus reaches to the roadside ditch and its adjacent wetlands.[3]

The following quotation is from *United States v. Rapanos*[4]:

> The evidence presented in this case suffices to show that the wetlands on Rapanos's land are adjacent to the Labozinski Drain, especially in view of the hydrological connection between the two. It follows under the analysis in *Deaton*, with which we agree, that the Rapanos wetlands are covered by the Clean Water Act. Any contamination of the Rapanos wetlands could affect the Drain, which, in turn could affect navigable-in-fact waters. Therefore, the protection of the wetlands on Rapanos' land is a fair extension of the Clean Water Act. Solid Waste requires a "significant nexus between the wetlands and 'navigable waters'" for there to be jurisdiction under the Clean Water Act. Because the wetlands are adjacent to the Drain and there exists a hydrological connection among the wetlands, the Drain, and the Kawkawlin River, we find an ample nexus to establish jurisdiction.[5]

The third and final quotation is from *United States v. Newdunn Associates*[6]:

> If this court were to conclude that the I-64 ditch is not a "tributary" solely because it is man-made, the CWA's chief goal would be subverted. Whether man-made or natural, the tributary flows into traditional, navigable waters. Accordingly, the Corps may permissibly define that tributary as part of the "waters of the United States."[7]

APPENDIX 2: Letter From Fred Disheroon, Esq., Concerning the Circumstances Surrounding the Corps of Engineers' Final Rule of April 3, 1974

Alexandria, Virginia
November 12, 2003

Lance D. Wood
Assistant Chief Counsel
Environmental Law and Regulatory Programs
U.S. Army Corps of Engineers
Washington, D.C. 20314

Dear Mr. Wood:

Thank you for the opportunity to read your draft article regarding the Corps of Engineers' actions in the 1970's implementing the Federal Water Pollution Control Act (FWPCA) of 1972, including the explanation of the Corps' final rule of April 3, 1974. I was personally involved in those matters, and I do have a clear recollection of them. In 1974 I served as the Corps of Engineers' Assistant General Counsel for Litigation, Enforcement, and Adversarial Proceedings, and I reviewed the Corps 1974 final rule in that capacity. In addition, I served as the Corps staff litigation counsel in the *NRDC v. Callaway* case, which challenged that 1974 rule. I believe your explanation of that general subject, including your explanation of the Corps' final rule of April 3, 1974, to be accurate and consistent with my personal recollections.

In 1974 Corps decisionmakers, and the senior Corps attorneys, did understand that the geographic jurisdiction of the FWPCA of 1972 as a whole extended much further than the Section 10 navigable waters, including non-navigable tributaries to the navigable waters. That understanding is reflected in the legal memo from Acting Corps General Counsel [William R.] Orlandi quoted in your article.

Nevertheless, some Corps officials, including the primary drafter of the final rule of April 3, 1974, Jacobus Lankhorst, believed that a legally defensible case could be made that the Corps and the Department of the Army could establish through rulemaking a separate, more limited geographic jurisdiction for the new Section 404 program estab-

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lished by the 1972 FWPCA. I was among the Corps personnel who advised Corps decisionmakers in 1974 that the final rule of April 3, 1974, would likely be challenged in the Federal Courts and would in all probability be overturned by the Courts as contrary to the mandates of the FWPCA regarding that statute's geographic jurisdiction. I did not believe that the Federal Courts would uphold the Corps's attempt to carve out a special, restricted geographic scope for the Section 404 program, in part because the EPA had not agreed to the Corps' 1974 rulemaking, and more generally because that rulemaking was contrary to the broad mandate of the FWPCA of 1972. In my opinion, Corps decisionmakers understood the legal risks inherent in the 1974 final rule, and the probability that the 1974 rule would not survive judicial review.

Nevertheless, the Corps had very little, if anything, to lose by promulgating the final rule of April 3, 1974, and potentially a great deal to gain. It was possible, though unlikely, that the Federal Courts could defer to the Corps's final rule and uphold it. Whether or not the 1974 final rule would prevail in the courts, it would still provide the Corps with important practical and political benefits, as your article accurately explained. I share your view that the Corps did not have adequate resources in 1974 to implement its new Section 404 regulatory program in all of the non-navigable waters that the FWPCA covered. The Corps' final rule of April 3, 1974, at the least would serve to "buy time" while the Corps decided how it could manage a program with a greatly expanded geographic jurisdiction under Section 404.

The Corps' leaders in 1974 understood that environmental plaintiffs would certainly challenge the Corps' final rule in the Federal Courts, because that 1974 final rule refused to assert CWA Section 404 jurisdiction over any aquatic areas beyond the Section 10 navigable waters. If, as most of the Corps' decisionmakers realistically expected in 1974, the Federal Courts did overturn the Corps' final rule of April 3, 1974, at least the regulated public and their congressional representatives would place the responsibility for that result on the Federal Courts, rather than the Corps, and leave no doubt that the resulting large expansion of regulatory jurisdiction, and the likely regulatory delays and inconveniences that followed for projects needing Section 404 permits from the Corps' under-resourced regulatory staff, was clearly required by federal law.

I am glad that your article will set the record straight on these subjects, since it is clear that some persons have very mistaken notions about the Corps' final rule of April 3, 1974, the Corps' regulatory program in the 1970's, and regarding the jurisdiction of the FWPCA in general.

Sincerely,

(Signature)
Fred R. Disheroon, Esq.

Testimony of the American Association of State Highway and Transportation Officials (AASHTO)

Committee on Transportation and Infrastructure
United States House of Representatives

July 17, 2007

AMERICAN ASSOCIATION OF
STATE HIGHWAY AND
TRANSPORTATION OFFICIALS
AASHTO
THE VOICE OF TRANSPORTATION

Testimony of the
American Association of State Highway and Transportation Officials (AASHTO)

Committee on Transportation and Infrastructure
United States House of Representatives

July 17, 2007

The American Association of State Highway and Transportation Officials (AASHTO) appreciates this opportunity to submit testimony on the scope of federal jurisdiction over the Nation's waters, including wetlands. AASHTO represents the transportation departments in the fifty States, the District of Columbia and Puerto Rico.

Introduction

The Clean Water Act plays a vital role in maintaining healthy aquatic ecosystems and a healthy economy. State transportation departments are doing their part to promote the goals of the Clean Water Act by embracing the principles of environmental stewardship, which call for integrating an environmental ethic into every aspect of an agency's work – from project planning and development to construction, operations, and maintenance.

Unfortunately, the many court decisions following implementation of the Clean Water Act went back and forth in expanding and reducing federal jurisdiction over "waters" and created considerable uncertainty about what "waters" are actually protected by the Clean Water Act. There was some hope that the Supreme Court would resolve, or at least reduce, the uncertainty last year in the Rapanos and Carabell cases. But those decisions ended up creating even greater uncertainty.

In their recent Rapanos/Carabell guidance, EPA and the Army Corps of Engineers have attempted to make sense of these court decisions. But given the varying views expressed by the justices themselves, it is no surprise that the guidance to a great extent perpetuates, rather than resolvs, the uncertainty about how far federal jurisdiction extends.

With all of this in mind, we appreciate this Committee's interest in finding ways to provide greater certainty to the regulated community about the extent of that federal jurisdiction over the waters of the United States. However, we are concerned that the legislation pending before the committee – H.R. 2421 – would have substantial negative ramifications that may not yet have been fully considered.

H.R. 2421, the "Clean Water Restoration Act of 2007"

H.R. 2421, the Clean Water Restoration Act of 2007, would delete the term "navigable waters" from the Clean Water Act, replace it with "waters of the United States," and then define that term expansively to include all interstate *and intrastate* waters, including all impoundments of those waters, ***"to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution."*** This definition is accompanied by findings in Section 1 of the bill that specifically invoke a range of Constitutional provisions – not only the Commerce Clause, but also the federal power to enter treaties and manage Federal lands – as the basis for this legislation.

Our fundamental concern with this bill is that it would not simply clarify the scope of federal jurisdiction under the Clean Water Act. Instead, it would greatly expand federal jurisdiction to include all intrastate waters, even those with no connection whatsoever to interstate commerce. The expansion of federal jurisdiction would result from creating a new and extremely broad definition of "waters of the United States." The key change is the declaration that Congress intends to exercise jurisdiction "*to the fullest extent*" *authorized by the Constitution* over all "waters" described in the definition *and* over all "*activities affecting these waters.*" No such definition exists in the Clean Water Act today. If this definition is adopted, it will send an unmistakable signal that Congress intended to broaden federal jurisdiction beyond the existing Clean Water Act.

The effect of the proposed definition is heightened by the lengthy list of findings contained in Section 1 of the bill. These findings are tailored to reflect an expansive view of the constitutional authority of Congress to regulate interstate and intrastate waters, including not only the authority to regulate interstate commerce, but also the authority to govern federal lands and enter treaties. Including these findings provides an even stronger signal to future regulators and courts that this legislation is intended to expand federal jurisdiction beyond the scope of existing law.

In our view, the practical effect of this legislation would be to bring within federal jurisdiction a wide range of "waters" that have at most a tangential and remote relationship to traditional navigable waters. It is reasonable to expect that federal jurisdiction would encompass many man-made ditches, gutters, and storm drains, including many built by DOTs as an integral part of transportation projects. While these types of facilities are not listed specifically in the definition, they could easily be interpreted to fall within the scope of the expansive definition in this bill.

Moreover, this bill would not resolve the uncertainties created by recent court decisions. Instead, because it includes sweeping new language expressing the intent of Congress to assert its authority to "the fullest extent allowed under the Constitution," there would be a new round of litigation about the extent of federal jurisdiction. *Every case* involving the extent of federal jurisdiction under the Clean Water Act would require courts to interpret the Constitution. Such an approach virtually ensures a high degree of conflict and no clear resolution within the foreseeable future.

Because it greatly expands federal jurisdiction, while also creating new uncertainties about how far that jurisdiction extends, this bill would undoubtedly impair State transportation agencies' ability to carry out their transportation programs. Each State DOT is responsible for planning and implementing hundreds, and in many case thousands, of road projects every year, ranging from minor repair and maintenance jobs to major construction projects. If HR 2421 were enacted, many more of those projects would require wetlands jurisdictional determinations and wetlands permitting. Federal permitting and environmental review requirements would be applied to man-made structures and isolated, intrastate wetlands that have only a limited, indirect link, if any, to our rivers, streams, and other water bodes. A tremendous waste of agency resources would result and important projects would be unavoidably delayed.

Some might say these concerns are overblown – that, in practice, the Corps and EPA will interpret this legislation with restraint. But the language of this legislation is so sweeping that the agencies will have little choice but to interpret it broadly, regardless of whether such a broad reading produces a common-sense result. And even if there are reasonable grounds for challenging the Corps' decision to assert jurisdiction in a particular case, it rarely makes sense to do so for a State transportation agency. To keep projects moving, States generally accept the Corps' decision and move on-progressing through the permitting process. The result is that this legislation will quickly result in a major expansion of federal regulatory involvement in transportation projects in every State. The result will be an even slower, more bureaucratic process than we have today.

It might also be argued that additional regulation, even if burdensome, is justified based on its environmental benefits. But in this case the benefits of increased regulation are speculative at best. The additional "waters" that would be subjected to federal regulation under this bill are for the most part wet areas or water-carrying structures with a tenuous, indirect connection, if any, to actual rivers, streams, and lakes, and wetlands that support them. Moreover, these non-federal waters are already protected by State water resources agencies. Providing an additional layer of federal regulatory protection for these waters will yield little if any environmental benefit.

So what should be done? We agree that clarification is needed to address this extremely complex and frustrating jurisdictional issue. However, rushing to a solution, no matter how well intended, carries a high risk of unintended consequences. We recognize this Committee's strong interest in this issue and remain interested in participating in an inclusive, collaborative process to gain jurisdictional clarification. We cannot support H.R. 2421 in its current form, but may be able to support future legislation, rulemaking or other administrative remedies that truly *clarify* the extent of federal jurisdiction rather than greatly expanding it. We also would be interested in discussing alternative approaches that streamline the process of meeting federal permitting requirements.

We appreciate the Committee's interest in this issue and the opportunity to submit this testimony. We would be happy to work with Committee members and staff to discuss potential approaches to clarifying the extent of federal jurisdiction over aquatic resources.

THE AMERICAN INSTITUTE OF ARCHITECTS

June 13, 2007

The Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
Rayburn House Office Building 2165
Washington, DC 20515

Dear Chairman Oberstar:

The American Institute of Architects and its 81,000 members believe that our nation must take the lead in fostering the sustainable use of our earth's precious resources. Therefore, we commend you for your visionary leadership in authoring H.R. 2421, The Clean Water Restoration Act of 2007.

Throughout America, architects are working with other professionals and their fellow citizens to design and build healthy, energy efficient and sustainable buildings and communities. The AIA has advocated for designing buildings in ways that conserve energy and water, and for creating communities in ways that protect vulnerable resources like water.

For too long, the meaning of the term "waters of the United States" has been misconstrued, and as a result, our nation's bodies of water have suffered. By clarifying the definition, your legislation will greatly improve water quality, protect human health, and help all of us create more livable communities.

The AIA applauds your role as defender of America's bodies of water. The AIA fully supports your efforts in this legislation we are happy to provide the assistance necessary to see that this bill is enacted into law.

Sincerely,

Paul Mendelsohn
Vice President, Government and Community Affairs

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July, 17th and 19th, 2007 - "Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act"

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July 19, 2007

Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
2365 Rayburn House Office Building
Washington D.C. 20515

Dear Congressman Oberstar:

The Association of State Floodplain Managers supports H.R. 2421, The Clean Water Restoration Act of 2007.

We write today in support of the provisions in H.R. 2421, the Clean Water Restoration Act of 2007. We believe this legislation is necessary to re-establish the Clean Water Act's jurisdiction to protect all waters of the United States. This is based on current court decisions in recent years that caused confusion over jurisdiction of the waters of the United States.

The Clean Water Restoration Act of 2007 will help preserve fully functional floodplains in these upland areas where scant other protection exists. In addition to reducing the heights and velocities of flood flows, the functional floodplain acts to preserve reduced nutrient loading, reduces sediment, and preserves water quality. All of these benefits are in addition to reducing flood losses. ASFPM believes that direction is still needed to provide guidance to state and local officials of where jurisdiction exists for granting permits. The Clean Water Restoration Act of 2007 accomplishes this with its simple, straight-forward fix. H.R. 2421 will clarify the scope of the Clean Water Act.

The Association of State Floodplain Managers is an organization of professionals involved in floodplain management, flood hazard mitigation, the National Flood Insurance Program, and flood preparedness, warning, and recovery. ASFPM represents the flood hazard specialists of local, state and federal government, the research community, the insurance industry, and the fields of engineering, hydrologic forecasting, emergency response, water resources, and others. The Association and its 26 Chapters represent over 11,000 state and local officials and other professionals who are engaged in all aspects of floodplain management and hazard mitigation.

Sincerely,

Larry Larson, P.E., CFM
ASFPM Executive Director

Cc. Ted Illston

Dedicated to reducing flood losses in the nation.

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The Association of State Wetland Managers, Inc.
"Dedicated to the Protection and Restoration of the Nation's Wetlands"

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Conservation

James Stoutamire
FL Dept. of Environmental
Protection

July 12, 2007

Honorable Members of Congress:

The purpose of the Clean Water Act can be summed up in two words: clean water. In survey after survey the public has identified clean water as their number one environmental concern. In recognition of the public's absolute reliance on clean water, the Association of State Wetland Managers urges passage of the Clean Water Restoration Act of 2007 (H.R.2421) to restore the scope of the Clean Water Act (CWA).

The United States Supreme Court decisions in SWANCC and Carabell/Rapanos have removed isolated wetlands together with the small streams, wetlands and headwater areas that do not meet a legally defined "significant nexus" test from Clean Water Act jurisdiction. This complex legal test, while intended to protect navigable waters, creates significant administrative hurdles, including longer waits for permit applicants, increased workloads for states implementing shared permitting authority, more detailed federal agency review, and delays and uncertainty in project planning. More importantly the new legal test does not protect the integrity of the nation's waters as a whole. Traditionally navigable waters are, in fact, only a very small fraction of all the waters of the United States, and a Clean Water Act focused only on those waters will not provide clean water for the nation.

Wetlands and smaller streams -- including those that do not flow year round -- are critical to the integrity of our nation's waters. They are:

- **Vulnerable to pollution.** They intercept 40% of the point source discharges requiring individual permits in the lower 48 states.
- **Critical to our drinking water supplies.** They are the source of drinking water for an estimated 110 million Americans.
- **Critical to reducing water levels during floods and hurricanes like Katrina.**
- **Vital for fish.** These waters provide food, habitat and water for trout, sturgeon, salmon and other important recreational and commercial fish and shellfish species.
- **Critical to migratory birds.** Wetlands and small streams provide essential habitat for many of the nation's waterfowl, songbirds and shorebird populations.
- **Important to global warming.** Wetlands store carbon estimated to be equal to 40% of the world's atmospheric carbon. In addition wetlands and headwater streams will provide important refuges and migration routes for species attempting to adapt to global climate change.
- **Essential to the economy.** A healthy economy relies on clean, plentiful water supplies. Eliminating and altering wetlands and headwater streams both degrade water quality and reduce base flow. This increases the cost of providing water for communities and agriculture.

ASWM supports passage of legislation to restore the scope of the whole Clean Water Act. The definition of waters addressed by the United States Supreme Court in SWANCC and Carabell/Rapanos applies to the whole Clean Water Act, not just the Section 404 (dredge and fill permit) program. The outcome of restricting federal jurisdiction for water quality standards development, implementation, and pollutant load calculation, point source permits and other portions of the Clean Water Act is unknown and troubling. One possible outcome will be tougher limits for point source discharge permits for navigable waters and their tributaries because reducing jurisdiction will reduce the ability to solve pollution runoff problems in headwaters. ASWM is concerned that restricting federal jurisdiction will place an unfair burden for reducing pollution on municipalities, individuals and companies along traditionally navigable waters and their tributaries. Polluters in upstream areas of a watershed should be held accountable for their actions as well.

The findings and the savings clause in H.R. 2421 have been included to eliminate the threat of future constitutional challenges in the courts and retain the existing exemptions from regulation. The savings clause maintains the extensive exemptions from regulation for agriculture, silviculture and other activities that are already in place.

Federal/State/Tribal partnerships are key to providing clean water to the nation. The Clean Water Act provides a framework for partnerships for national water programs. It ensures that water traveling across state boundaries meets minimum water quality standards. It offers real opportunities for states and tribes to take a leadership role in carrying out provisions of the Clean Water Act by delegating permit programs to the states and tribes, and by providing funding to support programs that protect water quality. Under the Clean Water Act, states and tribes may assume responsibility for implementing federal programs and may also develop more protective measures to ensure clean, sustainable water. Limiting the scope of Clean Water Act programs to only a fraction of the nation's waters will erode the effectiveness of these partnerships.

Over the past 30 years numerous federal, state and tribal partnerships have been developed as part of the Clean Water Act to protect and preserve our nation's water resources. Passage of the Clean Water Restoration Act of 2007 can ensure that such partnerships continue to provide clean water by protecting the physical, chemical and biological integrity of the full reach of our nation's waters.

Sincerely,

Peg Bostwick

Peg Bostwick
Chairman
Association of State Wetland Managers, Inc.

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July 16, 2007

The Honorable James L. Oberstar
Chairman
Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Oberstar:

The California Association of Sanitation Agencies (CASA) and the Association of California Water Agencies (ACWA) are pleased to provide our views on the Clean Water Restoration Act of 2007 (H.R. 2421). CASA is a statewide association of over 110 local public agencies that provide wastewater collection, treatment, disposal and water recycling services to 30 million Californians, the largest statewide association of public wastewater treatment agencies. ACWA is the largest coalition of public water agencies in the country. ACWA's 447 public agency members supply 90% of the water used by communities, cities, farms and businesses in California. Together, CASA and ACWA are dedicated to managing our water resources to protect public health and ensure a healthy environment throughout California.

H.R. 2421 aims to clarify the unsettled status of jurisdictional waters under the Clean Water Act. We agree that the Supreme Court's decisions in *SWANCC v. U.S. Army Corps of Engineers* and *Rapanos v. United States* have resulted in new challenges with regard to interpreting the reach of the Clean Water Act (CWA), and we appreciate your effort to provide clarification. To this end, our members have identified a number issues on which we would like to work with you to clarify and ensure certainty in the subsequent implementation of the statute. To be effective, we believe H.R. 2421 must unequivocally address three key questions regarding CWA jurisdiction: groundwater, waste treatment facilities, and stormwater conveyances.

The question of whether the CWA's reach extends to groundwaters has received recent attention from the lower courts. CASA and ACWA believe that Congress clearly intended to exclude groundwater from the CWA, a view shared by many, but not all federal courts. Thus, with regard to groundwater, the intent to "restore" jurisdiction to its pre-SWANCC status falls short of providing the certainty needed. It is not clear to us whether H.R. 2421 would extend federal authority to the regulation of groundwater supplies. Because the bill's definition of "waters of the United States" references "all waters", it would seem to capture groundwater. The inclusion of groundwater under

The Honorable James L. Oberstar
July 16, 2007
Page 2 of 2

the purview of the CWA would have significant implications for publicly owned treatment works and water suppliers in California, with regard to both water rights and water quality. To effectuate the stated intent of the legislation, we request that the bill be amended to clarify that groundwaters are excluded from the definition of waters of the U.S.

CASA and ACWA members are also very concerned about the impact HR 2421 may have on the existing wastewater treatment exemption. Under current federal regulations, waste treatment systems are exempted from CWA under 33 CFR 328.3(a)(7), 40 CFR 230.3(s)(7) and 40 CFR 122.2. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Wastewater treatment facilities frequently rely upon designed ponds or lagoons to meet CWA requirements and provide optimal treatment. We understand that it is not your intent to eliminate this exemption, but as introduced, H.R. 2421 does not contain an exemption for waste treatment facilities. We do not believe that regulations regarding the scope of the waters of the U.S. that pre-date the SWANCC decision would necessarily remain valid following revisions to the statutory definition. In order to ensure that wastewater treatment systems may remain operational without challenge, we respectfully request that the waste treatment exemption be incorporated into H.R. 2421.

A final concern centers on the application of H.R. 2421's provisions as they relate to municipal stormwater systems. The inclusion of stormwater conveyances in the definition of jurisdictional waters has significant implications for our members. For example, if an unauthorized overflow of untreated wastewater reaches a storm drain where it is cleaned up before reaching a flowing stream or the ocean, our members would not be subject to citizen suits or federal enforcement for the overflow. If, however, storm drains are considered waters of the U.S., capture and cleanup of overflows will be discouraged and hampered, given that the discharge will already be subject to liability. In addition, storm drains are arguably part of waste treatment infrastructure that should be exempt from CWA jurisdiction for reasons akin to those for wastewater treatment facilities. Therefore, we request that H.R. 2421 be amended to clarify the status of conveyances that are part of a permitted municipal separate storm sewer system.

CASA and ACWA appreciate your consideration of these matters and look forward to meeting with you and your staff to discuss these issues. If you have questions or wish to discuss this matter further, please contact Eric Sapirstein, CASA's federal representative, at (202) 466-3755; or David Reynolds, ACWA's federal representative, at (202) 434-4760.

Sincerely,

Catherine Smith	Tim Quinn
Catherine Smith	
Executive Director	Executive Director

cc: The Honorable Bob Filner
The Honorable Ellen O. Tauscher
The Honorable Grace Napolitano
The Honorable Doris Matsui
The Honorable Gerald McNerney
The Honorable Gary G. Miller

CHAMBER OF COMMERCE
OF THE
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R. BRUCE JOSTEN
EXECUTIVE VICE PRESIDENT
GOVERNMENT AFFAIRS

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July 17, 2007

The Honorable James L. Oberstar
Chairman
Committee on Transportation and
Infrastructure
United States House of Representatives
Washington, DC 20515

The Honorable John L. Mica
Ranking Member
Committee on Transportation and
Infrastructure
United States House of Representatives
Washington, DC 20515

Dear Chairman Oberstar and Ranking Member Mica:

The U.S. Chamber of Commerce, the world's largest business federation representing more than three million businesses and organizations of every size, sector, and region, opposes H.R. 2421, the "Clean Water Restoration Act of 2007." H.R. 2421 unreasonably extends the scope of federal Clean Water Act (CWA) authority from the "navigable waters of the United States" to, essentially, any area within a state that happens to be wet. The result of such legislation would be massive permitting delays, federal preemption of state and local land and water use decisions, and a *de facto* unfunded mandate on states.

In *Rapanos v. United States*, 126 S. Ct. 2208 (2006), the United States Supreme Court rejected the notion that CWA jurisdiction extends to all areas with a "hydrological connection" to navigable waters. Although the ink has barely dried on the decision, H.R. 2421 attempts to skirt *Rapanos* and broaden CWA jurisdiction. By deleting the term "navigable" from "navigable waters of the United States," H.R. 2421 grants the Environmental Protection Agency and U.S. Army Corps of Engineers an unprecedented level of authority not just over those areas with a "hydrological connection," but over all wet areas within a state, including groundwater, ditches, pipes, streets, municipal storm drains, and gutters. Those agencies would exercise virtually unlimited regulatory authority over waters presently under state jurisdiction.

Such a move would cause major problems. The already-overwhelmed federal permit program would practically crumble under the weight of increased applications. The Chamber's members estimate that it takes two to three years to obtain an individual permit, and that there is a 15,000 to 30,000 permit backlog. The increased federal authority granted by H.R. 2421 will increase such delays exponentially; as a result, businesses that need these permits as a condition to doing business (real estate, electricity transmission, transportation, and mining) will not be able to obtain them.

Moreover, any existing state or local permitting programs will, at best, conflict with or, at worst, be eradicated by H.R. 2421. Land and water use decisions, once the province of state and local governments, will have to be routed through the federal government. Compliance with these new requirements—water quality standards, effluent limitation guidelines, Total Maximum Daily Loads, and expanded workload for state-administered CWA programs—will amount to a de facto unfunded mandate on states.

The Supreme Court recommended that regulatory action consistent with its holding in *Rapanos*. It did not suggest that Congress circumvent *Rapanos* through new legislation. H.R. 2421 expands federal CWA authority to waters never intended to be covered by the Act, and could destroy the existing federal-state water regulatory structure. For all the aforementioned reasons, the Chamber opposes H.R. 2421.

Sincerely,

R. Bruce Josten

R. Bruce Josten

Cc: Members of the Committee on Transportation and Infrastructure

CHESAPEAKE BAY FOUNDATION
Saving a National Treasure

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June 13, 2007

The Honorable James L. Oberstar
Chairman, Committee on Transportation and Infrastructure
U.S. House of Representatives
2365 Rayburn House Office Building
Washington, D.C. 20515

Dear Congressman Oberstar:

I am writing to inform you that the Chesapeake Bay Foundation (CBF) is in full support of the passage of the Clean Water Restoration Act of 2007. We believe that such legislation is vital to the health of the nation's water resources and to CBF's principal concern — the protection and restoration of the Chesapeake Bay.

CBF is the only independent 501(c)(3) organization dedicated solely to restoring and protecting the Chesapeake Bay and its tributary rivers. Since 1967, our goal has been to improve water quality by reducing pollution to The Chesapeake Bay, North America's largest and most biologically diverse estuary.

Sadly, pollution is choking the Bay and many of its tributary rivers. In the summer of 2005, 41 percent of the volume of the Bay was considered a "dead zone," an area with insufficient oxygen to support marine life. The Chesapeake Bay Program, a multi-state, mutil-agency partnership led by the U.S. Environmental Protection Agency (EPA), recently declared that the size of this area is the largest on record. This anoxic zone is caused in large part by excessive nitrogen, phosphorous, and sediment discharges to the Bay and its tributaries. CBF strives to reduce this pollution.

CBF recognizes that one of the methods of reducing and controlling water pollution and "dead zones" is through stringent permitting, monitoring and enforcement of pollution discharges. Recent United States Supreme Court decisions in *SWANCC v. USACE and Rapanos v. United States* coupled with the EPA/USACE guidance recently published in response to *Rapanos* limit permitting agencies' authority to regulate these pollution discharges into waterways, thereby limiting the effectiveness of this method of water quality protection and preservation.

The Chesapeake Bay receives its fresh water from an intricate system of tributaries which includes a network of 110,000 streams and 1.7 million acres of wetlands. Many of the Bay's watershed stream miles are non-navigable a significant percentage of these have an intermittent or epehemeral flow. Similarly, almost 90 % (about 1.5 million acres), of the Chesapeake Bay watershed's non-tidal wetlands intermittently drain or tend to drain to larger tributaries of the Chesapeake Bay or directly into the Bay. These wetlands and non-navigable streams are imperative to restoring and protecting the Chesapeake Bay as they:

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filter pollutants and reduce sediment loads downstream, moderate flood flows, are essential sources for pure drinking water, and serve as habitat for fish, shellfish, waterfowl and sea grasses.

The Court's interpretation of *Rapanos* has left these non-navigable tributaries and wetlands without the protection of the Clean Water Act and in great peril of environmental degradation. One study, published by the U.S. Fish and Wildlife Service in 2006 noted that over 36,000 of these palustrine or non-tidal wetland acres were destroyed between 1982 and 1989 alone, and the Court's ruling means that these important ecosystems face even greater danger. CBF understands that the Clean Water Restoration Act of 2007 has become integral to ensuring the safety of these wetlands.

CBF also recognizes that passage of this Act is imperative if the goals of The Chesapeake 2000 agreement are to be met. The Chesapeake 2000 agreement set ambitious requirements to improve the water quality and restore the living resources of the Chesapeake Bay and its watershed. Its signatories, the states of Virginia, Maryland, Pennsylvania, the District of Columbia, the Chesapeake Bay Commission and the U.S. Environmental Protection Agency, representing the federal government, must recognize that without CWA jurisdiction over non-navigable tributaries and adjacent wetlands, the Bay partners cannot achieve the stricter water quality standards and waste load allocations necessary to "Save the Bay."

Accordingly, the Chesapeake Bay Foundation wholeheartedly endorses the introduction and passage of the Clean Water Restoration Act of 2007 and encourages all members of the United States Congress to work for its passage.

Sincerely,

Roy A. Hoagland
Vice President, Environmental Protection and Restoration

CHESAPEAKE BAY FOUNDATION
Save the Bay

STATEMENT OF THE CHESAPEAKE BAY FOUNDATION

TO THE
COMMITTEE ON TRANSPORTATION AND INFRASTUCTURE

HEARING ON
"STATUS OF NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JUSRIDICTION OF THE FEDERAL POLLUTION CONTROL ACT"

AUGUST 10, 2007

Recent United States Supreme Court decisions in *SWANCC v. USACE and Rapanos v. United States* coupled with the Environmental Protection Agency (EPA) / US Army Corps of Engineers (USACE) guidance recently published in response to *Rapanos* have stripped Clean Water Act safeguards and limited permitting agencies' authority to regulate pollution discharges into certain waterways. These rulings and guidance affect the nation, yet the Chesapeake Bay watershed will be specially impacted.

The impact of these decisions to the water-quality of the Bay watershed is significant and analyses of such impacts serve as a case study from which Congress may better understand the effects of these recent decisions and the need for a legislative remedy to protect water quality. To that end, The Chesapeake Bay Foundation, a 501(c)(3) founded in 1967, submits the following comments in support of the Clean Water Restoration Act of 2007.

The Chesapeake Bay Ecosystem

The Chesapeake Bay, a national treasure, is the largest and most biologically diverse estuary in North America. It is home to more than 3,600 species of unique animals, fish, and plants including bald eagles, blue crabs, menhaden, striped bass (rockfish), osprey, oysters, and the American lotus.

The Bay proper is approximately 200 miles long, stretching from Havre de Grace, Maryland to Norfolk, Virginia. Including its tidal tributaries, the Bay has approximately

11,684 miles of shoreline. The Chesapeake Bay watershed encompasses 64,000 square miles and some or all of six states and the District of Columbia. Fifty major tributaries traverse the Appalachian, Piedmont and Atlantic Coastal Plain before flowing into the Chesapeake Bay.

The Chesapeake Bay receives half of its water from an intricate network of 110,000 streams and 1.7 million wetlands, most of which are non-navigable tributaries and non-tidal wetlands that drain or "tend to drain" to those tributaries. These wetlands and tributaries are very much like the wetlands and tributaries at issue in the *Rapanos* case. The headwater streams and wetlands of the 64,000 square mile Chesapeake Bay watershed are inseparably bound to the Susquehanna, the Potomac, the James, and the other large navigable rivers that flow to the Bay. This intricate hydrological network cleanses the surface water, recharges the groundwater, moderates the flood flows, and provides the aquatic habitat on which the ecological and economic life of the Chesapeake Bay and its watershed depends.

Most of the Bay Watershed's Stream Miles are Non-Navigable and Have Intermittent Surface Water Flow

One hundred and eleven thousand (111,000) miles of creeks, streams and rivers throughout the Bay watershed converge into fifty major tributaries that send water to the Chesapeake Bay. The Bay's nine largest tributaries contribute 93% of the total fresh water to Chesapeake Bay, about half of the Bay's total water volume. The Susquehanna River is the Bay's largest tributary and contributes more than one half of the freshwater that enters the Bay. The Susquehanna and its tributaries originate as small headwater streams and wetlands in New York, drain Central Pennsylvania, and empty into the Bay in Maryland. The Potomac and James Rivers are the next two largest tributary systems flowing to the Chesapeake Bay. The Potomac and its tributaries drain western Maryland, eastern West Virginia, Northern Virginia, and the District of Columbia. The James River and its tributaries drain a wide swath of central Virginia from the Appalachians to the Chesapeake Bay.

Each of these major Bay tributaries begins at their headwaters, far upstream of the navigable-in-fact rivers they will become. Headwaters are formed from the dendritic system of wetlands, swales and small streams that make up the beginnings of most watersheds. Headwater streams comprise the majority of streams and waters in a watershed, and they play the most important role within the watershed in improving water quality by filtering runoff, sediment, nutrients, and contaminants before they move further downstream.

EPA estimates that first-order headwater streams, alone, comprise over 50% of the over 200,000 miles of streams in EPA Region III, which encompasses most of the Chesapeake Bay watershed. The Pennsylvania Department of Environmental Protection estimates that 56% of Pennsylvania's total stream miles are first-order streams.

The Bay watershed's extensive headwater streams are important tributaries to downstream navigable waters, but they do not always flow year round; nor do they always flow above ground. Many EPA Region III first-order streams have intermittent flow periods during the summer months or during dry years. The Delaware Department of Natural Resources and Environmental Control has estimated over 24% of the stream length in Delaware is represented by intermittent streams.

Headwater streams in the limestone or karst regions of the Bay watershed flow underground for some length before they re-emerge as a surface stream some distance downstream. For example, the Lost River in West Virginia is a tributary to the Cacapon River, which flows to the Potomac River and ultimately to Chesapeake Bay. At one point in West Virginia, the Lost River appears to suddenly dry up, but in actuality it flows underground for some 2.5 miles before it returns to the surface downstream as the Cacapon River. These types of streams have a definite hydrological connection to downstream navigable-in-fact rivers, though the connection is not apparent by observing surface water flows exclusively. As the law currently stands, these intermittent or underground streams are no longer protected by the CWA.

Most of the Bay Watershed's Wetlands are Non-Tidal Wetlands Connected to Tributaries

Approximately 1.7 million wetland acres remain in the Chesapeake Bay watershed. Almost 90% (about 1.5 million acres) of these remaining wetlands are non-tidal, freshwater "palustrine" wetlands, including freshwater marshes, wet meadows, forested swamps, and bogs.

Forested palustrine wetlands comprise the bulk of these freshwater wetlands. These are the freshwater wetlands most likely to be considered "adjacent" for CWA purposes because they are located next to but not within the banks of freshwater lakes, streams, or rivers. Some might be considered "isolated," though most of these are connected to surface waters by groundwater.

EPA Region III estimates that roughly 36% of the Chesapeake Bay watershed's remaining wetlands are headwater wetlands and about 12% of the Region's remaining wetlands are headwater wetlands that lack a perennial or intermittent surface water connection to navigable-in-fact waters. These Bay area headwater wetland habitats include bogs, fens, Delmarva Bays, eastern vernal pools, and pocosins.

An estimated 35-39% of the wetland acreage in 2002's U.S. Fish and Wildlife Service Upper Delmarva Potholes (or Bays) study area was designated "isolated," though many of these wetlands were likely to have groundwater connections to streams. Measured in terms of the number of area wetlands that are "isolated," 77-81% of the Delmarva wetlands were designated "isolated" by this definition. In addition to groundwater connections, many headwater wetlands on the Delmarva Peninsula are connected to downstream waters by drainage ditches. For example, the Pocomoke River watershed on the Delmarva Peninsula contains an estimated 1,930 km of artificial ditches.

Field studies of 37 headwater wetlands sites in Region III demonstrated that "[g]roundwater is a major component of the hydrological interaction between wetlands, terrestrial and aquatic systems in the upper part of the watershed. Fully 73% of the assessed sites had groundwater pathways connecting them to downstream water bodies." Groundwater was frequently one of several hydrological sources linking downstream waters.

Importantly, EPA's field studies also found that "[m]any observed interrelationships between headwater wetlands or wetlands with non-traditional linkages [linkages by non-perennial surface and/or groundwater flows] and their surroundings require on-site inspections. Soils data and landscape interpretation in particular were important in understanding hydrological relationships." Consequently, while the great majority of Bay watershed headwater wetlands are connected hydrologically to downstream navigable-in-fact waters, identifying the connections with precision in each case for regulatory purposes is often very time and resource intensive. As the law currently stands, these wetlands are no longer protected by the CWA.

Bay Watershed Headwaters Filter Pollutants

Extensive phosphorus and nitrogen pollution causing algae blooms and low-oxygen dead zones is the most significant threat to Chesapeake Bay watershed restoration. In 2003, 350 million pounds of nitrogen and 30 million pounds of phosphorus entered the Bay through its nine major tributaries. Chesapeake Bay's headwater wetlands and streams are essential tools in combating this nutrient enrichment because they absorb, filter, and recycle excess nutrients, preventing eutrophication. CWA jurisdiction over these water bodies is imperative to ensure the health of the Chesapeake Bay watershed.

Studies have shown that non-tidal wetlands near the Chesapeake Bay removed an estimated 89% of the nitrogen and 80% of the phosphorus that entered the wetlands through upland runoff, groundwater, and bulk precipitation. In Eastern Maryland, concentrations of nitrate have been found to decrease in watersheds with a prevalence of forested wetlands. Wetlands restored in an agricultural area on the Delmarva Peninsula removed an average of 68% of nitrogen in the form of nitrate, and an average of 25% in the form of dissolved ammonium, indicating that restored wetlands can make a substantial contribution toward the EPA Chesapeake Bay Program's nutrient reduction goals.

Wetlands perform a vital role in maintaining water quality by trapping sediment and toxic and non-toxic pollutants before they reach streams, rivers, or other open bodies of water. Given sufficient time, many (but not all) of these pollutants will decompose, degrade, or be absorbed by wetland vegetation. When a wetland is dredged, however, and the dredged spoil is redeposited in the water or wetland, pollutants that had been trapped may be suddenly released.

The relationship between nutrient pollution and loss of non-tidal adjacent wetlands and non-navigable tributaries can be seen in the Wicomico River sub-watershed on Maryland's Lower Eastern Shore. There, watershed indicators show a distinct correlation between high nitrogen and phosphorus loading rates and extensive alteration of headwater wetlands and streams. Protecting and restoring the Chesapeake Bay's adjacent wetlands and non-navigable tributaries is essential to reducing nutrient loads downstream in the Chesapeake Bay and its major tributaries.

In addition to its impact on nutrient pollution, the regulation of headwater wetlands and streams are essential to ensure for pure drinking water supplies, flood control measures and the sustainability of the Bay's fish and wildlife populations.

Bay Watershed Headwater Streams and Wetlands Supply Clean Drinking Water

Between 148 and 526 surface drinking water intakes, serving populations ranging from 535,000 to 3 million people, are located in non-navigable headwaters in Chesapeake Bay states. The headwaters of the Potomac River and other Chesapeake Bay tributaries serve as a natural filter for drinking water. Residents of the Delmarva Peninsula rely on ground water aquifers for drinking water and other water supplies, at least some of which are vulnerable to contamination from pollutants discharged into headwater wetlands, streams, and ditches.

Bay Watershed Headwater Streams and Wetlands Slow Flood Flows

These headwater wetlands and streams provide for the graduated release of surface and groundwater flows, holding back heavy surface water flows during storm events, and releasing base flow through groundwater during dry periods.

Conversely, destruction of these headwater wetlands and streams will contribute to larger flood flows downstream, and decreased base flow to streams, reducing water quality and harming aquatic flora and fauna. Wetlands along traditionally navigable water bodies and their immediate tributaries lack the capacity to regulate flood flows alone. For example, growth in storm sewers and paved surfaces around Watts Branch, Maryland more than tripled the number of floods and increased average annual flood size by 23 percent. Cumulative wetland losses in watershed headwaters, and in the natural floodplain, can exacerbate flooding events, resulting in commercial losses, including disruption of commercial waterborne traffic in downstream navigable-in-fact waters.

Bay Watershed Headwater Streams and Wetlands Provide for Wildlife Habitat

Non-tidal wetlands throughout the Bay watershed provide essential services to finfish and shellfisheries in the Chesapeake Bay. For example, Maryland's non-tidal wetlands support numerous fish (menhaden and striped bass) and shellfish (blue crabs and oysters) species, either directly by providing habitat, or indirectly by regulating freshwater flow and filtering pollutants. Approximately 200 fish species use Chesapeake Bay waters. Maryland's non-tidal seasonal and temporarily flooded wetlands provide spawning, feeding, and nursery habitat for some freshwater fish species during flooding periods, and some also appear to be important in supporting the invertebrate food base for Maryland's riverine fisheries. Bay watershed non-tidal wetlands and tributaries support a healthy freshwater sport fishery. In 2001, 367,000 resident and non-resident anglers fished in Maryland's fresh waters. Over 720,000 fished in Virginia's.

Bay headwaters and other non-navigable tributaries and adjacent wetlands provide essential water quality and quantity functions that support the Chesapeake Bay's striped bass, shad, and perch fisheries, among others, by regulating freshwater flow and filtering pollutants, helping protect critical spawning and nursery habitat for these species. The upper reaches of Chesapeake Bay tidal waters and the upper mainstem are used as spawning and nursery grounds for striped bass, shad, perch and other fish. The importance of this use is reflected in state and federal water quality standards that assign a "migratory fish spawning and nursery" designated use to these waters. Compliance with these standards is essential to meeting water quality goals for the Bay pursuant to the CWA and the Chesapeake Bay Agreements. These water quality standards cannot be met if the non-navigable tributaries and wetlands that flow to the tidal tributaries do not provide essential services such as pollution filtration and sediment control.

Bay watershed headwaters and other non-navigable tributaries and adjacent wetlands support the Bay's world renowned shellfishery by reducing nutrient and sediment loads in downstream waters, and thereby fostering growth of submerged aquatic vegetation ("SAV") with increased water clarity and increases in dissolved oxygen from reductions in nutrient loads. SAV provides essential habitat for immature and molting blue crabs.

Oyster and blue crab commercial harvests have declined since the 1970s due to the combined effects of several factors including pollution and the loss of SAV. Still, the Chesapeake Bay remains one of the world's largest producers of blue crabs. The Chesapeake region blue crab harvest in 2004 was 58.4 million pounds, worth over $44 million. The Bay region also harvested 342, 000 pounds of hard clams worth over $1.3 million. Currently, the combined value of the Chesapeake's shellfish and finfish harvests is estimated around $1 billion annually. The Chesapeake Bay fisheries so central to the region's culture and economy are clearly placed in harm's way by the removal of CWA protections upstream.

In addition to its marine life population, The Chesapeake Bay watershed is home to 29 species of waterfowl and is a major resting ground along the Atlantic Migratory

Bird Flyway. Every year, one million waterfowl winter in the Bay watershed. At one time, millions of waterfowl spent their winters in the Bay region, supported by profuse SAV beds and supplemental diets rich in invertebrates. The destruction of wetlands, and dramatic declines in SAV and water quality, among other things, have reduced the number of waterfowl in the Bay area to about one million birds. Loss of SAV and non-tidal wetland habitat must be reversed to protect and restore the waterfowl and other migratory bird populations, not only of the Chesapeake Bay watershed, but of the entire Atlantic Migratory Bird Flyway.

CWA Jurisdiction Throughout the Watershed is Essential to Protect and Restore the Chesapeake Bay

The argument that states alone can best protect their non-navigable tributaries and adjacent wetlands rings hollow in the Chesapeake Bay watershed. Not all Bay watershed states have their own wetland programs that are as comprehensive as those for which the CWA and the EPA and Corps regulations provide. Nor are their wetland programs similar in every respect. Thus, an upstream state may not regulate wetlands as strictly as its downstream neighbor, thereby impeding the downstream state's ability to comply with its water quality standards and tributary strategies as it determines is necessary to protect its waters. In addition, without a federal regulatory "umbrella", including Corps and EPA oversight, regulation of dredged and fill material and other pollutant discharges to those waters would not be uniform.

Controlling nutrient and sediment loads upstream -- in the headwaters and other non-navigable tributaries and adjacent wetlands -- before these pollutants enter larger downstream tributaries, is essential to improving downstream water quality in the Chesapeake Bay. Restricting Clean Water Act jurisdiction to the largest Bay tributaries and their adjacent wetlands will make it nearly impossible for the Bay states to meet the revised water quality standards and waste allocations necessary to achieve their water quality restoration goal.

Left to piecemeal state-by-state regulation, the non-navigable tributaries and adjacent wetlands of the Bay watershed will be subject to further degradation. These concerns have prompted the state-federal Chesapeake Bay Partnership, the three Chesapeake Bay Agreements, and the linchpin of cooperative federalism embodied in these agreements and their progenitor, the CWA.

Clean Water Act Jurisdiction to Protect Wetlands is Vital to Bay Restoration

The Chesapeake Bay states recognize that to restore the living resources of the Bay, they must protect and restore the Bay's "natural infrastructure": its "thousands of miles of river and stream habitat that interconnect the land, water, living resources and human communities of the Bay watershed." The Bay states recognize, in particular, the importance of protecting and restoring submerged aquatic vegetation (SAV), wetlands, streams, and riparian forests for their erosion reduction and water quality filtration capabilities. SAV restoration will require more stringent water clarity standards and strategies. Increasing water clarity requires decreasing nutrient and sediment loads. Headwater wetlands and streams contribute to improving water clarity in the Bay.

The Bay states commit to "achieve a no-net loss of existing wetlands acreage and function in the signatories' regulatory programs." This commitment cannot be honored without Clean Water Act jurisdiction that extends to non-navigable tributaries and their adjacent wetlands. The District of Columbia has no independent regulatory program that can ensure no-net-loss of wetlands within its boundaries. Neither does West Virginia. New York's wetlands program does not regulate many non-tidal wetlands under 12.4 acres in size.

While Maryland, Virginia, and Pennsylvania do have independent wetlands regulatory programs, their success in ensuring no-net-loss of existing wetlands depends to no small extent on the uniform federal "no-net-loss" standard. The federal §404 program also provides important support for these state programs, sharing the burdens of wetland delineation, functional assessment, permit review and enforcement. Narrowing Clean Water Act jurisdiction will shift more of the economic burden for regulating headwaters and other adjacent wetlands and non-navigable tributaries to state and local governments.

The Chesapeake Bay states committed to achieve a *net wetland resource gain* by restoring 25,000 acres of tidal and non-tidal wetlands by 2010. Absent Clean Water Act regulation of non-navigable streams and adjacent wetlands this public investment in wetland restoration will be undermined by unregulated wetland alteration and degradation.

CWA Jurisdiction Over Non-Navigable Tributaries and Adjacent Wetlands Drives the Stricter Water Quality Standards Needed Throughout the Bay Watershed

Clean Water Act-mandated water quality standards are central to meeting the CWA goal to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). With technical support and oversight from EPA, states designate the specific ecological and economic "uses" of state waters and then promulgate narrative and numeric criteria that must be met by point source dischargers of pollutants in order to achieve the "designated uses." EPA acts as an important federal backstop for state promulgation and implementation of state water quality standards. CWA §303, 33 U.S.C. §1313, requires states to submit new or revised water quality standards to EPA for approval. EPA must disapprove any state standard that it finds inconsistent with the CWA, and if the state fails to satisfy EPA's concerns, EPA must promulgate a substitute water quality standard for the state.

EPA's oversight of state water quality standards helps ensure that the standards submitted by each state comply with the CWA, and are no less stringent than the CWA allows. If the CWA no longer extends to non-navigable streams and adjacent wetlands, the applicability of water quality standards to these waters is open to question, particularly where EPA has published the water quality standard for the state. As a result, EPA's ability to ensure that state water quality standards will achieve the goals of the CWA would be undermined.

CWA §303(d) requires states to list as "impaired waters" those waters that are not meeting state water quality standards. The law further requires that Total Maximum Daily Loads (TMDLs) be developed and implemented to bring those impaired waters back into compliance with state water quality standards. A TMDL defines the pollutant load that a waterbody can assimilate without triggering violations of water quality standards and then allocates the loading of each pollutant of concern to specific contributing point sources (e.g, industrial and municipal waste water treatment plants) and non-point sources (e.g., agricultural run-off).

If smaller upstream tributaries and their adjacent wetlands are excluded from CWA jurisdiction, some states – or regulated entities within states -- would argue that they need not list those waters as impaired and therefore need not establish TMDLs for those waters. In any event, TMDLs for downstream impaired waters will fail to meet water quality standards if the TMDLs cannot limit pollutant loadings in upstream tributaries and adjacent wetlands.

Conclusion

The Chesapeake Bay ecosystem and the Chesapeake Bay Agreements demonstrate that the extensive networks of headwater streams, wetlands, and ditches, as well as other non-navigable tributaries and adjacent wetlands located upstream in watersheds, are inseparably bound up with downstream navigable waters, and that the Clean Water Act goal of maintaining and restoring the physical, chemical, and biological integrity of the Nation's waters cannot be met unless intermittent streams and wetlands adjacent to non-navigable tributaries are subject to Clean Water Act jurisdiction. For these reasons the Chesapeake Bay Foundation wholly supports honoring Congressional intent and restoring the Clean Water Act to its pre-*SWANCC* authority via the passage of the Clean Water Restoration Act of 2007.

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Before the House Committee on Transportation and Infrastructure's Hearing on the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Testimony of Adrienne Esposito
Executive Director
Citizens Campaign for the Environment

August 10, 2007

On behalf of Citizens Campaign for the Environment (CCE) and our 80,000 members throughout New York State and Connecticut, we am thankful for the opportunity to provide testimony to the House Committee on Transportation and Infrastructure, on the status of our nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act, or Clean Water Act.

CCE is an 80,000 member, non-profit, non-partisan advocacy organization working to protect public health and the natural environment in New York State and Connecticut. CCE supports policies and actions that are based on a philosophy of prevention, conservation, and environmental sustainability.

The Clean Water Act

The Clean Water Act (CWA) was passed 35 years ago, with the goal of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA has done a great deal to protect the nation's lakes, rivers, streams and wetlands from unregulated pollution and destruction. Despite the progress that has been made since the adoption of the CWA, the health of our waters remains threatened by pollution and habitat destruction.

Recent Supreme Court decisions (*SWANCC 2001, Rapanos/Carabell 2006*) and subsequent federal guidance changes, have limited and confused the scope of federal protection for our nation's waters. The SWANCC decision has resulted in the Army Corps of Engineers field staff to stop applying CWA protections to virtually all so-called "isolated" waters without prior permission from agency headquarters in Washington, D.C. This policy directive far exceeds the scope of the *SWANCC* ruling, effectively denying protection to many waters that still warrant it under existing regulations. The Rapanos and Carabell cases looked at whether the CWA protects non-navigable tributaries and their adjacent wetlands. These Supreme Court decisions have only generated further ambiguity as to what waters are protected by the CWA, and have ultimately resulted in further degradation of our nations waters, particularly our wetlands.

Why are wetlands important?
Commonly referred to as nature's kidneys, wetlands provide essential benefits to the people and environment of New York State, Connecticut, and across the nation. The many benefits of wetlands include:

- ***Improving Water Quality*** - Wetlands protect water supplies by intercepting polluted runoff before reaching our region's valued water bodies, *including, but not limited to, the Niagara River, the Great Lakes of Erie and Ontario, the Finger Lakes, the St. Lawrence River, the Mohawk, the Chesapeake Bay, the Hudson River, the New York City reservoir system, South Shore Estuary and the Long Island Sound.* Filtration of pollutants is a natural function of wetland ecosystems, improving water quality. They protect drinking water supplies by absorbing contaminants such as pesticides and nitrogen.
- ***Preserving Biodiversity*** - Wetlands preserve biodiversity by providing unique habitat to countless species of fish, wildlife and plants. Some animals spend their entire life in wetlands, while others utilize these areas as feeding, breeding and nesting grounds. More than half of all threatened or endangered species depend on wetlands during their lifecycle.
- ***Avoiding Flood Damage*** - Billions of dollars in property damage are saved annually by wetlands buffering storm water and absorbing floodwaters.
- ***Supporting Industry*** - Wetlands yield economic benefits by providing essential spawning grounds for commercially valuable fish and shellfish. They also provide essential tourism dollars from aesthetic and recreational opportunities including bird watching and fishing. *Wetlands create economic value adding over $50 billion to the Great Lakes regional economy, and over $8 billion to the Long Island Sound regional economy every year.*

What is at stake?
Limiting federal protection of navigable waterways ignores the most important sources of clean water, including headwaters, wetlands, and intermittent streams that are essential for habitat, flood protection, and clean drinking water supplies.

Examples of bodies of water in danger across the nation:

- Twenty million acres of the nation's remaining wetlands are at risk from irreversible destruction by draining, filling or degradation.
- Nearly 2 million river miles, representing almost 60% of America's stream miles outside of Alaska, could be compromised.
- Drinking water supplies for more than 110 million people are potentially threatened as a result of relaxed protections for small streams.
- More than 14,000 industrial facilities may be exempt from pollution permits if facilities are discharging into CWA-exempt wetlands or streams.

Examples of New York and Connecticut water bodies in danger:

- 66% of wetlands near eastern Lake Ontario;
- 22% of the wetlands in the NYC water supply watershed;
- 34% of waterways in the Croton watershed; and
- 22,400 acres of wetlands in Connecticut, and approximately 442,000 acres throughout New England.

The Great Lakes
The Great Lakes are a natural wonder of the world that holds one-fifth of the world's fresh water supply. Comprising over 700 miles of New York's shoreline, Lake Erie, Lake Ontario, and the St. Lawrence Seaway hold the key to our economic health, recreation, and irreplaceable family experiences. The Great Lakes supply millions of New Yorkers with their drinking water, provide habitat for wildlife, and support billion dollar industries such as tourism and fishing.

The Great Lakes are currently on the tipping point of ecological collapse, and protecting Great Lakes wetlands and tributaries is critical to restoring the health of the ecosystem. Unfortunately, the Great Lakes region has already lost an estimated sixty-six percent of the wetlands that existed when the first non-indigenous settlers arrived.

Protecting Great Lakes wetlands and tributaries is a critical component of the comprehensive Great Lakes Regional Collaboration (GLRC) plan to protect and restore the Great Lakes. Developed by an unprecedented team of 1,500 citizens, industry leaders, federal agency officials, Great Lakes governors and mayors, Native American Tribes, environmental and conservation groups, and other stakeholders throughout the Great Lakes basin, the GLRC plan provides a blueprint to address the most serious problems facing the Great Lakes. The GLRC plan recommends restoring the traditional definition of "waters of the United States" intended by Congress.

There is a solution
The Clean Water Restoration Act (CWRA) of 2007 **(H.R. 2421)** would restore the traditional definition of "waters of the United States" intended by Congress. The law would not be giving our nation's waters new protections; it would simply be restoring the regulatory status quo that had been used since 1972. Americans need these safeguards to achieve the goal of restoring and maintaining the chemical, physical and biological integrity of the nation's waters.

Specifically CWRA would:

1) Adopt a definition of "waters of the United States" based on the longstanding definition that the US Environmental Protection Agency and the US Army Corps of Engineers have used in their regulations since 1972;
2) Clarify that the Clean Water Act is principally intended to protect the nation's waters from pollution, and not just maintain navigability;
3) Assert that Congress has constitutional authority over the nation's waters, as defined in the CWA, including so-called "isolated" waters, headwater streams, small rivers, ponds, lakes and wetlands.
4) Clarifies that nothing in the act shall remove any current exemptions to the CWA, including agricultural exemptions to the CWA.

Passage of the Clean Water Restoration Act (H.R. 2421) will provide significant benefits to the people and environment in New York, Connecticut, and throughout the nation. The longer we wait to take action on this legislation, the problems will only get worse, and the solutions will become more expensive.

Thank you for your thoughtful consideration of our testimony.

Statement of
Coachella Valley Water District, CA

Presented by
Steve Robbins, General Manager-Chief Engineer

Hearings of July 17 and 19, 2007

"Status of the Nation's Waters, including Wetlands, under the Jurisdiction of the Federal Water Pollution Control Act"

September 4, 2007

Regarding U.S. H.R. 2421 and S. 1870

Coachella Valley Water District (CVWD) opposes H.R. 2421 (Oberstar) and S. 1870 (Feingold), companion legislation seeking to amend the *Federal Water Pollution Control Act* (FWPCA), commonly known as the *Clean Water Act* (CWA/Act), to expand federal authority to include every body of water in the United States—regardless of its size, use, hydrology or any connection to or impact upon other bodies of water.

This legislation is unnecessary, Rather, agencies responsible for CWA enforcement need to acknowledge that CWA knowingly places limits on their authority, and that in creating the Act, Congress recognized that the most effective environmental laws are those where there is a cooperative effort between federal and state government, with participation and input by others affected by these regulations, including CVWD and its constituents.

H.R. 2421 and S. 1870 are misguided, attempts to appease some special interests that are unhappy with recent decisions by the United States Supreme Court, rulings that recognized that the Act was not meant to give the federal government unbridled authority over every "wet" location in the nation.

The Act's jurisdiction is identified as "navigable waters of the United States." This term, or the abbreviated "navigable waters," appears 80 times in the 230-page Act, as last amended through November 2002. Clearly, this reflects a desire by Congress that the two federal agencies responsible for the CWA's enforcement—the Environmental Protection Agency (EPA) and Army Corps of Engineers (Corps)—limit their actions to those best suited to meeting the objective of the Act: "to restore and maintain the chemical, physical and biological integrity of the Nation's water."

Goals of the Act included eliminating by 1985 the "discharge of pollutants into the navigable waters;" and, by July 1, 1983, "wherever attainable . . . water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water."

While significant progress toward each goal has been achieved, neither has been met entirely so additional work remains to be done. The most effective formula for success, however, continues to be a cooperative effort between the federal government, the states and other stakeholders; not by granting the EPA and the Corps unlimited authority.

Expanding these agencies' jurisdiction over every body of water in the nation cannot occur without diminishing the authority of other levels of government. Despite sweeping revisions to the Act in the 1970s, Congress never lost sight of the importance of limiting federal authority to ensure that states' rights were not trampled.

> Section 101, b. states: "It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of the States to prevent, reduce, and eliminate pollution, (and) to plan the development and use (including restoration, preservation and enhancement) of land and water resources."

Thus, the presence of "navigable" in the CWA has provided an important safeguard that has limited overzealous enforcement of the Act by the EPA and the Corps. When either agency has overstepped its authority, the result on occasion has been court battles, with several cases reaching the United States Supreme Court.

A 1985 Supreme Court ruling (*United States v. Riverside Bayview Homes, Inc.*) upheld the federal government's authority to regulate wetlands adjacent to navigable waters. More recent rulings, however, have not set well with H.R. 2421 and S. 1870 advocates.

In *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers (2001)*, the Supreme Court rejected the Corps' position that it could regulate isolated waters because of the presence of migratory birds, narrowing water and wetland areas subject to federal regulation. In the highly controversial *Rapanos v. United States* (2006) justices agreed CWA's jurisdiction extended beyond strictly navigable waters, but they did not reach a consensus regarding specific definitions of the Act's authority. This split ruling prompted EPA and the Corps to rewrite their regulations, the results of which further angered those who now champion H.R. 2421 and S. 1870.

This legislation will *not* lead to improved water quality or reduce water pollution. Instead, it will jeopardize the ability of agencies such as CVWD to provide essential services to its constituents—including water delivery and regional flood protection—by expanding a federal bureaucracy incapable of handling existing CWA permit requests and other paperwork. The resulting sea of red tape will be anything but navigable.

Instead of considering bills virtually identical to ones it rejected in 2003 and 2005, Congress is encouraged instead to develop legislation that enhances a cooperative relationship between the federal government and the states with respect to water quality; while encouraging states where necessary to adopt tough clean water regulations of their own. By comparison, H.R. 2421 and S. 1870 will reduce the effectiveness of the CWA because it decreases the motivation for states and other entities to participate. The bills also lack any safeguards to ensure that local agencies such as CVWD are able to provide basic services.

Proponents of these bills unfairly label *all* opponents to S. 1870 and H.R. 2421 as special interest groups or developers. CVWD is neither. The district always supports legitimate, viable efforts to improve water quality and reduce water pollution, and is eager to work with state, federal and other agencies.

CVWD routinely provides 120 million gallons of domestic water every day to its customers. Every drop meets stringent state and federal health standards for drinking water, and the district appreciates the specialized assistance it receives from state and federal regulatory agencies, which oversee compliance efforts, review and approve treatment processes and perform sanitary surveys.

The district was created under authority of the California Legislature and is governed by five community service-minded board members who are elected at large by registered voters within district boundaries. CVWD operates as a local government entity and is managed and staffed by highly trained administrators, engineers, specialized tradesmen, water quality specialists and other professionals.

Representatives from industry, including agriculture, recreation and development, government agencies and other public and private organizations are encouraged to provide input and insight regarding CVWD policies and procedures; but the district is accountable first and foremost to our constituents.

Those constituents include more than a quarter of a million people for whom we provide water-related service.

These Coachella Valley residents repeatedly have demonstrated they have complete confidence in CVWD's ability to provide them with safe, affordable water to drink—without asking that federal representatives come in and tell the district how to manage groundwater supplies. Because H.R. 2421 and S. 1870 seek to grant vastly expanded authority to the EPA, there are genuine concerns that the most essential source of water in the region could inappropriately and unnecessarily fall under jurisdiction of the CWA.

The valley's growers—who produce crops on 60,000 acres of some of the most productive farmland in the nation—worry about federal intervention in the use of imported water for irrigation and the removal of farm drainage. Despite assurances to the contrary, there are fears that exceptions to the Act—essential if agriculture and other industries are going to continue to operate in the United States—will be tossed aside if these bills are approved.

Consider, for example, a typical farmer in the Coachella Valley. He irrigates his crops with non-potable, Colorado River water that is delivered to the valley by the Coachella Canal, then sent to his property in concrete, underground laterals. He utilizes a drip system to irrigate his crops because it conserves water and increases his yield. On his property is a private reservoir, fenced and inaccessible to the public or other unauthorized personnel. The reservoir enables him to irrigate more effectively, and affords him the opportunity to add fertilizers and pesticides directly to the water. In addition to being a more efficient farming method, this process reduces the amount of chemicals released into the atmosphere through more traditional fertilization and pest-control practices.

Even with proven conservation measures in place, some of this water will not be utilized by his crops and will become irrigation drainage. This will be carried away by underground pipes and open channels, none of which are intended for public access or contact. Much of the drainage will flow into a storm channel; what doesn't evaporate or seep into the ground ends up in a federally-designated agricultural drainage repository.

This district's water quality experts and other professionals have studied H.R. 2421 and S. 1870 carefully, and are concerned these bills' amendments will remove the previously mentioned exemptions, placing the canal, farmers' reservoirs and irrigation drainage under the jurisdiction of the EPA and the Corps.

The canal, already under the jurisdiction of the federal Bureau of Reclamation, carries Colorado River water that is suitable for non-potable purposes "as is," and for potable purposes when treated. (This is the same water Metropolitan Water District of Southern California treats, then delivers to nearly 18 million Southern California residents for domestic use.) Although not required to do so, CVWD tests its Colorado River water for bacteria indicators and other contaminants and the results show this water meets water quality objectives and does not need additional protection.

In the future, CVWD and at least two cities in Coachella Valley will be investigating the viability of treating canal water for drinking and other domestic uses. State and federal drinking water standards and other regulations *already in place* ensure this water will be safe to drink and use for other purposes. Proposed amendments to the CWA will not improve the quality of this water and will, in all likelihood, make the entire process more cumbersome, expensive and difficult to manage. Meanwhile, the costs to farmers, homeowners and other consumers no doubt will increase, since all new expenses incurred by agencies such as CVWD in complying with existing, expanded, redefined or new regulations are passed on to customers in the form of higher rates and increased fees.

Growers already have expressed concerns that additional costs for water could drive them out of Coachella Valley. Farmers might opt for greater use of private well water, which would adversely affect the long-term reliability and sustainability of groundwater supplies. This could reduce groundwater storage capacity permanently, diminish overall water quality as contaminants near the surface come in closer proximity to pumping sources and create subsidence that would destroy homes, businesses and infrastructure.

Rather than face unreasonable regulations—water within private farm reservoirs would never meet Clean Water Act standards—growers might abandon more efficient irrigation techniques, reversing the effects of decades of agricultural water conservation and further jeopardizing local water supplies.

Then again, traditional irrigation involves flooding rows of land with irrigation water; might these, too, qualify as "waters of the United States." Would a farmer need a special permit each time he wants to water his carrots? Or to weed his irrigation conveyances?

Already, farmers face an uncertain future because a Total Maximum Daily Load (TMDL) for bacteria has been established for agricultural drainage flowing into the Coachella Valley Stormwater Channel. The first step is monitoring by farmers, even though a Regional Water Quality Control Board already acknowledged that agricultural drainage is not expected to be a primary source of bacteria. The second phase will involve as-yet-to-be-undetermined control measures, the responsibility for which we are certain will fall upon farmers/CVWD, with additional costs passed back on to consumers.

In addition to domestic water and sanitation services, agricultural irrigation and drainage, groundwater recharge and water management, recycled water, conservation and other water-related services and programs across an area of more than 1,000 square miles within three counties in an arid desert region of Southern California, CVWD provides regional flood control for homes and businesses within more than 375,000 acres. This area of service is genuinely life-saving in nature and among the toughest to provide since crucial funding for new facilities (even maintenance of existing ones) is extremely difficult to obtain; and the weather that causes deadly storms entirely unpredictable.

Within stormwater protection can be found but one example of the regulatory quagmires associated with federal enforcement of the *existing* Act. The Whitewater River-Coachella Valley Stormwater Channel collects floodwater, agricultural drainage and treated wastewater. Water that does not evaporate or seep back into the aquifer flows into the Salton Sea (the previously mentioned federally-designated agricultural drainage repository).

The region receives—on average—three inches of rain annually, so while the area's waterways (excluding the canal and irrigation drainage channels) usually are dry; the rare storm can create massive "gully-washer" floods that threaten life and property.

For many years, CVWD and the Corps had an agreement that delineated the middle 50 feet of man-made channel as an area where the Corps had CWA jurisdiction. This ensured that the "waters" within the channel were not "polluted" by maintenance, while preventing vegetation from damaging the channel's flood protection capabilities.

Last year, however, without warning, the Corps changed its position, citing CVWD for violating the Act for performing routine maintenance in the channel.

District staff has worked tirelessly to obtain from the Corps the permits necessary to ensure the storm channel is maintained, but cannot get clear direction on jurisdiction or mitigation.

Meanwhile, lives and property are in danger, since devastating floods can strike at any time and our maintenance efforts apparently will be thwarted for many years.

If CWA jurisdiction is expanded to all other tributaries (natural and manmade) in the region, CVWD expects the results also will jeopardize lives and property while repairs and maintenance to flood control facilities are stopped or unnecessarily delayed.

Before the authority of the EPA and Corps is expanded to include additional sources of water, Congress needs to call a timeout, go back and redefine the appropriate scope and authority of these agencies over their existing jurisdictions. This alone will eliminate much of the litigation associated with the Act, and restore CWA to what was originally intended by Congress. H.R. 2421 and S. 1870 fail to do this, so should not be enacted.

Before the House Committee on Transportation and Infrastructure's Hearing on the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Testimony of John Katko,
President
Friends of Wetlands

Friends of WETLANDS
P. O. Box 2016, Elyria OH 44036; www.fowl.org

August 4, 2007

Friends of Wetlands is a grassroots organization dedicated to the protection and public awareness of wetlands and wetland issues. We issue a quarterly newsletter, with a mailing list of approximately 1400 addresses, including about 150 life members.

A series of 5 - 4 decisions by the U.S. Supreme Court within the last decade (including *SWANCC* and *Rapanos*) have subverted the intent of Congress under the 1972 Clean Water Act and crippled protection of "hydrologially isolated" and other wetlands under that statute. Changes in regulatory rules promulgated by the Bush Administration also undercut protection of and jurisdiction over wetland habitats. There is an urgent need for Congress to not only restore this jurisdiction but to further strengthen protection of our nation's waters – including its wetlands, which vitally contribute to the chemical, biological, and physical integrity of our waters.

H.R. 2421 seeks to clearly re-state the historic intent of The Clean Water Act. It does not extend or broaden the law or overturn current exemptions for farming or other activities. It simply clarifies that our government can and must protect all waters of the United States.

Great Lakes wetlands and tributaries are important components to the region's comprehensive plan to protect and restore the world's largest source of fresh surface water. Ohio wetlands filter sediment and pollutants that are washed off farm fields and city streets and into Great Lakes tributaries and the lakes themselves. They provide vital habitat to wildlife, waterfowl and fish. Wetlands also reduce flooding by absorbing heavy rains that fall throughout the year. Great Lakes wetlands also create economic value adding over $50 billion to the region's economy every year.

Ohio's rivers and streams are also important to reduce pollution and sedimentation into the Great Lakes. For example, the Black, Rocky, Huron, Vermilion, Cuyahoga, Portage, Maumee, Ashtabula, Grand, and Chagrin Rivers are critically important to the establishment of self-sustaining Great Lakes fish communities and other wildlife populations. Adequate natural buffers slow run off, trap sediments and fertilizers and create habitat for endangered species.

The coastal marshes of the Western Basin of Lake Erie,as well as Sandusky Bay, deserve particular attention, protection, and management. These marshes are a central component to the ecosystem of the Western Basin – one of the most productive freshwater fisheries in the world, and one that could become a model of environmental restoration.

The benefits of wetlands and tributaries throughout the Basin and in Ohio, however, are diminished as more and more Great Lakes wetlands disappear and rivers are impaired. Already, Ohio has the dubious honor, along with California, of the nation's highest wetland loss; each state has destroyed over 90% of the wetlands that existed within them when the first non-indigenous settlers arrived, and the consequences have been severe: more polluted runoff dirties the Great Lakes; the loss of habitat reduces the biodiversity in a region that relies on outdoor recreation and tourism.

The longer we wait, the more expensive and complicated the tasks of restoration and protection become. It is much easier and more farsighted to avoid the destruction of wetlands and other habitats than to try to remedy such damage once it has been done.

Passing H.R. 2421 will help efforts in our region and in Ohio to protect our Great Lakes– and America's – wetlands. Please exercise the leadership that will earn honor and the thanks of future Americans.

Great Lakes Aquatic
Habitat Network & Fund

Testimony of Jill Ryan, Executive Director

**Before the House Committee on Transportation and Infrastructure's
Hearing on the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction
of the Federal Water Pollution Control Act**

August 9, 2007

Thank you for the opportunity to voice my support for H.R. 2421 and concern about efforts to undermine this endeavor.

Wetlands and tributaries through the Great Lakes basin are key to the health of the Great Lakes themselves. Wetlands are like a sponge that soaks in dirty water and drips out clean water. When it rains or snow melts and water flows across land contaminants are picked up such as fertilizers, pesticides, motor oil and other chemicals leaking from automobiles, de-icing chemicals and road salts. With no buffer, these contaminants end up in our streams, rivers, lakes, and the Great Lakes – destroying fish and wildlife habitat and ending up in our food chain. However, wetlands, acting like a sponge, significantly reduce the amount of contaminants entering our waterways by filtering contaminated runoff before it enters our waterways. Additionally, like a dripping sponge, water is released more slowly into our waterways resulting in deceased flooding and prevention of thermal pollution -- temperature change in natural water bodies caused by human influence which can impact aquatic organisms by decreasing oxygen supply, killing fish juveniles, and affecting ecosystem composition.

Wetlands provide economic values that add over $50 billion to the region's economy every year. They are home to more types of plants and animals than another other habitat in the Great Lakes basin. They are the birthplace for many fish species that alone support a $5 billion sport fishing industry.

Sadly, the region has destroyed an estimated sixty-six percent of our wetlands. Such consequences include contaminated runoff harming our inland waterways and the Great Lakes, resulting in damage to our fish, wildlife, and people. Along with the loss of critical habitat for fish and wildlife we have economic losses to our outdoor recreation and tourism incomes.

The Clean Water Act historically protected *all* wetlands and tributaries in the Great Lakes region – those by the shore and those inland. Two Supreme Court rulings and negative administrative actions now undermine Congress' original intent to protect all of America's waters and wetlands. H.R. 2421 seeks to clearly re-state the historic intent of this law. It clarifies that our government can and must protect all waters of the United States. It does not extend or broaden the law or overturn current exemptions for farming or other activities.

If we want the Great Lakes to be healthy for today and future generations, restoring Great Lakes wetlands and rivers is crucial. The longer we wait the more expensive and complicated the task becomes. Passing H.R. 2421 is the responsible thing to do. It will help efforts in our region to protect our Great Lakes wetlands and rivers.

Before the House Committee on Transportation and Infrastructure's

Hearing on the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Testimony of Tom Fuhrman

August 3, 2007

Lake Erie Region Conservancy
501 E 38 Street
Erie, PA 16546

The citizens of Northwest Pennsylvania strongly support the Clean Water Restoration Act and encourage Congress to pass this much-needed legislation. Even though Pennsylvania has only 43 mile of Lake Erie shoreline, it remains our most precious resource in terms of our survival as a former industrial region. It supplies our fresh water for life, recreation, tourism and our overall quality of life.

Our wetlands and tributaries are vital to the region's comprehensive plans to protect and restore the Great Lakes. They help filter sediment and pollutants from NSP sources and provide essential habitat for wildlife. The steelhead fishery alone in Erie County is estimated to be around $15 million annually. Elk Creek, in Western Erie County is considered to be one of the best shallow stream steelhead fisheries in the world and attracts sportsmen from around the world.

According to a recent report from the Brookings Institute, the Pennsylvania Lake Erie region is consuming a lot of land as it sheds density. Between 1982 and 1997, the Erie area developed 4.5 acres for every new household compared to the national average of 1.3. In aggregate terms, the region increased its urbanized footprint by 32,400 acres, or almost 50 percent, during years when the number of households grew by less than 7,300, or only7.4 percent. As a result, density in the region declined by 33 percent. Erie County also lost 5,300 acres of prime farmland during this period.

This loss of farmland, wetlands and open space greatly reduces the biodiversity in the region that relies on outdoor recreation and tourism. For years, the Clean Water Restoration Act protected all wetlands and tributaries in the Great Lakes region. Recent Supreme Court rulings and the current arrogance of the administration toward loosening the protection of our natural resources is now undermining the purpose of original act and now, HR 2421 aims to reinforce its original intent.

It should be noted that Lake Erie is the most environmentally sensitive of all of the Great Lakes and is unique that it is shared by 5 of the 8 Great Lake states. Any loosening of the minimal environmental restrictions that exist will most definitely send Lake Erie backwards toward the

'60's when it was declared DEAD. We cannot take that risk and therefore request that Congress pass HR 2421, the Clean Water Restoration Act.

OFFICE OF THE GOVERNOR
STATE OF MONTANA

BRIAN SCHWEITZER
GOVERNOR

JOHN BOHLINGER
LT. GOVERNOR

June 18, 2007

The Honorable Denny Rehberg
U.S. House of Representatives
516 Cannon House Office Building
Washington, D.C. 20515

Dear Representative Rehberg:

I am writing to urge you to co-sponsor legislation amending the Federal Water Pollution Control Act to reaffirm and clarify the jurisdiction of the United States over "waters of the United States" that have been protected by the law for the past three decades. Representative Oberstar introduced H.R. 2421 with 157 original co-sponsors in the House earlier this month. Senator Feingold is seeking co-sponsors for a companion Senate bill.

This simple legislation, The Clean Water Restoration Act, reaffirms the original intent of Congress when it enacted the Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act) to restore and maintain the chemical, physical, and biological integrity of the waters of the United States.

Two recent U.S. Supreme Court decisions (SWANCC, 2001 and Rapanos, 2006) have undermined the ability of the federal and state governments to protect the many streams, ponds, and wetlands under the Clean Water Act, putting more and more of the nation's and Montana's valuable resources at risk of pollution and destruction. These decisions directly affect the safety of our drinking water, habitats for endangered wildlife, and fragile ecosystems. The Clean Water Restoration Act would end the legal wrangling about what Congress meant when it passed that landmark law in 1972. The bill re-establishes protection for all waters historically covered by the Clean Water Act and makes clear that Congress's primary concern in 1972 was to protect the nation's waters from pollution, rather than just sustain the navigability of waterways.

Montana has supported strong national leadership in the Clean Water Act in response to these two Supreme Court cases. In 2003, our Montana DEQ submitted comments to the Bush Administration on the Advanced Notice of Proposed Rulemaking Relating to the Definition of "Waters of the United States" (attached). Fortunately, at the urging of Montana and more than 40 other states, the federal agencies withdrew their proposal to reduce the scope of waters safeguarded by federal law in that proposed rulemaking. More recently, the Montana Attorney General joined 32 other Attorneys General in submitting an Amicus Brief in the Rapanos case on the side of the federal government in support of strong Clean Water Act protections for all historically covered waters (attached).

The importance of Montana's water resources—including intermittent and ephemeral streams that account for approximately 70% of Montana stream miles and wetlands—cannot be overstated. These waters are critical components of the hydrologic cycle supporting flood control, groundwater recharge, filtering out nutrients and pollutants, and providing essential habitat for 60% of species identified as having greatest conservation need in Montana.

It's imperative that we reaffirm the original intent of Congress to protect these aquatic resources when it enacted the Clean Water Act and again I encourage you to support this legislation.

Sincerely,

BRIAN SCHWEITZER
Governor

Statement of the National Association of Home Builders to the U.S. House Committee on Transportation and Infrastructure

Status of Waters, Including Wetlands, Under the Federal Water Pollution Control Act

The National Association of Home Builders (NAHB) hereby submits this statement regarding the status of waters, including wetlands, under the Federal Water Pollution Control Act. NAHB's members are frequently subject to regulations under the Clean Water Act (CWA). NAHB has accordingly developed comprehensive familiarity with the CWA's permitting requirements, provides compliance advice to its members, and, unfortunately, has witnessed numerous situations where federal regulators have expanded the scope of their authority beyond the CWA's boundaries. We commend the Committee for holding a hearing on this topic in an effort to gather information on the efficacy of the CWA and its regulatory scope.

NAHB is a Washington, D.C.-based trade association whose mission is to enhance the climate for housing and the building industry. NAHB's chief goal is to provide and expand opportunities for all consumers to have safe, decent and affordable housing. As "The Voice of America's Housing Industry," NAHB helps promote policies that will keep housing a national priority. A federation of more than 850 state and local associations nationwide, NAHB's membership includes over 235,000 member firms, many of them small businesses, who employ over 8,000,000 people. NAHB's builder members will construct about 80 percent of the more than 1.4 million new housing units projected for 2007, making housing one of the largest engines of economic growth in the country.

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) have historically asserted broad jurisdiction over "waters of the United States." Because the nature of the home building industry involves substantial earth-moving activities, NAHB members often must obtain or operate pursuant to Clean Water Act Section 402 and 404 permits. For example, EPA has deemed construction activities "industrial activities" and therefore require permits for storm water discharges associated with construction activities under Section 402. Similarly, many earth-moving activities, such as land clearing and lot grading have required a Corps Section 404 permit, even for areas that may be wet for only a few days per year and/or exhibit few qualities as an aquatic resource.

For years, landowners and regulators alike have been frustrated with the continued uncertainty with the scope of federal jurisdiction over "waters of the United States" under the CWA. While the U.S. Supreme Court has weighed in on several occasions, the culmination of *United States v. Riverside Bayview Homes, Inc.*,[1] *Solid Waste Agency of Northern Cook County v. United States Army Corps of Eng'rs* (*SWANCC*)[2] and the more recent *Rapanos v. United States*[3] has provided a framework when determining which waters fall under the federal government's purview.

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[1] 474 U.S. 121 (1985).

[2] 531 U.S. 159 (2001).

[3] 126 S. Ct. 2208, (2006).

Within this framework, the regulated community requires a clear and simplified permitting process.

NAHB and its members have been advocates of the CWA since its inception. Our members regularly design their projects to avoid sensitive areas, showcase natural resources, and mitigate adverse impacts. As an organization, NAHB has tirelessly advocated for the CWA and an associated permitting scheme that is consistent, predictable, timely, and focused on protecting true aquatic resources. NAHB has also strongly supported implementing measures that honor the Congressional design of a cooperative federal and state program where the Corps' and EPA's efforts are complemented by states' efforts. The CWA has helped the nation make significant strides in improving the quality of our water resources. By improving its implementation, removing redundancy, and further clarifying roles, the CWA can do an even better job at facilitating compliance and protecting the aquatic environment.

I. The Importance of the Word "Navigable" in the Clean Water Act

The Clean Water Act was designed to "restore and maintain the chemical, physical and biological integrity of the Nation's waters."[4] It aims to meet those goals through two specific permitting programs and a number of technology- and water quality-based requirements for dischargers. The touchstone of the CWA is its application to "navigable waters." In enacting the CWA, Congress chose to assert jurisdiction over "navigable waters." The term "navigable waters" is important because once deemed a "navigable water," the permits, limits and prohibitions of the CWA apply immediately. The very fact that "navigable waters" is found 81 times within the statute suggests Congress' intent and illustrates the importance of this key word.

Interpreting the phrase "navigable waters" over the years has been complex. Three key cases, *Riverside Bayview*[5] in 1985, *SWANCC*[6] in 2001, and *Rapanos*[7] in 2006, all dealt with this phrase. Prior to *Rapanos*, Congress held hearings to address the Corps's haphazard implementation of "navigable waters" jurisdiction,[8] and in 2004, the General Accounting Office also reported rampant regulatory inconsistencies.[9]

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[4] 33 U.S.C. § 1251(a).

[5] 474 U.S. 121 (1985).

[6] 531 U.S. 159 (2001).

[7] 126 Sup. Ct. 2008 (2006).

[8] See, e.g., Agency Implementation of the *SWANCC* Decision: Hearing Before the H. Subcomm. on Energy Policy, Natural Resources, and Regulatory Aff. of the H. Comm. on Gov't Reform, 107th Cong. 2 (2002) (statement of Rep. Doug Ose, Chairman, H. Subcomm. on Energy Policy, Natural Resources and Regulatory Affairs) (Corps determinations have "resulted in widely varying interpretations of the scope of jurisdiction," and the "current situation is creating confusion and chaos").

[9] U.S. General Accounting Office, *Waters and Wetlands: Corps of Engineers Needs to Evaluate Its District Office Practices in Determining Jurisdiction* 3 (Feb. 2004), *available at* http://www.gao.gov/new.items/d04297.pdf , at 3 ("Districts apply different approaches"); *id.* at 4 (districts need "[t]o provide greater clarity to the regulated community"); *id.* at 22 ("three different district staff" would probably make "three different assessments").

In *SWANCC*, the Court found nonnavigable isolated ponds that had no connection to a navigable water were not within the Corps' jurisdiction. The Court explained that the word "navigable" in the term "navigable waters" shows "what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made."[10]

The *Rapanos* Court similarly reaffirmed Congress' intent for the word "navigable," in the phrase "navigable waters," to have meaning. Although the complicated 4-1-4 decision did not provide absolute certainty for jurisdictional questions, all of the Justices agreed that the CWA covers more than navigable-in-fact waters and a majority of the Justices recognized that the CWA's scope must remain moored to such waters. Justice Kennedy was critical that "the dissent reads a central requirement out [of the CWA]—namely, the requirement that the word 'navigable' in 'navigable waters' be given some importance."[11] Even in backing the "significant nexus" principle as the essential component of CWA jurisdiction, Justice Kennedy wrote: "Consistent with *SWANCC* and *Riverside Bayview* and with the need to give the term 'navigable' some meaning, the Corps' jurisdiction over wetlands depends on a significant nexus between the wetlands in question and navigable waters in the traditional sense."[12] Accordingly, after *Rapanos*, it is safe to maintain that CWA coverage goes beyond navigable-in-fact waters—but not so far upstream so as to discount the Act's "navigable water" foundation. While a bright line is not drawn, *Rapanos* makes clear that the CWA, while using an expansive definition of "navigable," does not extend to *all* non-navigable ditches, drains, and other features in the landscape.

Contrary to this interpretation, H.R. 2421, "The Clean Water Restoration Act," aims to eliminate the word "navigable" from the CWA and replace it with a new definition of the term "waters of the United States." This change would result in the most significant legislative expansion of the CWA since its adoption in 1972 by premising the CWA's jurisdiction on "the legislative power of Congress under the Constitution." Most troubling with this expansion is that a landowner would have difficulty providing sufficient defense against a federal government assertion of authority because the support for federal jurisdiction is unknown. If H.R. 2421 were to pass, the courts would ultimately decide whether a "water" is subject to CWA's jurisdiction. Such litigation would involve not just the scope of the CWA, but also the scope of Congress' Constitutional authority. This bill gives EPA and the Corps jurisdiction over essentially all wet areas across the country including impoundments, groundwater, ditches, pipes, streets, gutters, and desert features. In the end, removing the word "navigable" and expanding the definition of "waters of the United States" is even more ambiguous than current regulations. By regulating any "activity" that affects "waters of the United States," as broadly defined in H.R. 2421, the bill provides the agencies and courts with room for expansive interpretation that will provide no certainty to landowners.

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[10] *SWANCC*, 531 U.S. at 172.

[11] *Rapanos*, 126 Sup. Ct at 2247. (Kennedy, J., concurring in the judgment).

[12] *Id.* at 2249.

The CWA's connection to navigable waters is an essential part of the statute and must be preserved. Words do have meaning, especially in a landmark environmental law like the Clean Water Act, and had Congress intended that the word "navigable" have no meaning at all, it would have used another term in its place. Any attempt to remove the word "navigable" from the CWA would run counter to the history of the statute and must be rejected.

II. Regulatory, not Legislative, Action Is Needed to Clarify the CWA's Scope.

Following the Supreme Court decision in *SWANCC* and more recently *Rapanos*, various parties have investigated a range of options for addressing the jurisdictional scope of the Clean Water Act. Based on the success of the CWA over the past 30 years, it is imperative for protecting the nation's waters. Part of the strength of the statute is the fact the states work in tandem with the federal government to provide additional safeguards through both CWA-required and state-initiated programs. Due to the intricacies of the statute, questions regarding terminology, practice, and implementation are more appropriately addressed administratively rather than through legislation. Any Congressional proposal should be carefully reviewed, debated and vetted for unintended consequences. Given the significant strides EPA and the Corps have made in completing guidance and providing direction, NAHB continues to urge EPA and the Corps to move forward with a rulemaking to clarify ambiguities and implement improvements to the Section 404 permitting process.

A. The CWA Protects a Vast Array of Aquatic Resources

The CWA has been protecting and improving the nation's waters for nearly 35 years. It has been responsible for significant improvements, including the establishment of more than 20,000 Total Maximum Daily Limits (TMDLs) to improve stream and lake quality, the removal of significant amounts of contaminated sediment from the Great Lakes, and reducing the rate of wetlands loss by more than 75%. The CWA, inclusive of all of its current programs and requirements, has resulted in marked progress in the quality of the nation's lakes, rivers, and streams.

The CWA requires permits for discharges of pollutants, including fill material, into "navigable waters," which Congress defined as "waters of the United States."[13] The Corps and EPA have defined "waters of the United States" to include some navigable waters and some which are not navigable-in-fact – from the territorial seas and major rivers to intermittent steams and tiny ponds with no minimum size requirements. The Corps further construes "navigable waters" to include water bodies in the traditional sense as well as wetlands that do not appear wet on the surface.

The Supreme Court decisions in *Riverside Bayview*, *SWANCC*, and *Rapanos* concur with the agencies' interpretation, that the scope of the CWA is broader than traditional navigable waters. Indeed, one must only look to Justice Scalia's plurality decision in *Rapanos*, which recognized, "[t]he Act's term 'navigable waters' includes something more than traditional navigable waters,"[14] Furthermore, the plurality "affirmatively reject[ed]" an interpretation that the CWA "includes only navigable-in-fact waters."[15] The Justices' confirmed that the CWA's reach goes beyond traditional navigable waters and "navigable" is broadly defined within the realm of the CWA.

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[13] 33 U.S.C. §1362(7).

[14] 126 S. Ct. at 2220 (Scalia, J.).

Accordingly, there are categories of water bodies that most parties agree are jurisdictional under the CWA, including waters that are, have been, or could be used (with reasonable improvements) to transport interstate or foreign commerce, and waters subject to ebb and flow of tides. In addition, while nonnavigable interstate waters and perennial streams that are tributaries to traditional navigable waters are not traditional navigable waters, they are generally jurisdictional.

The CWA also extends beyond traditionally navigable waters to those wetlands determined to be adjacent. The definition of waters of the United States includes "wetlands adjacent to waters of the United States."[16] It is in the definition of "adjacent," however, where the complications and disagreements arise. "Adjacent" is defined by the Corps' regulations to mean "bordering, contiguous, or neighboring."[17] While *Riverside* held that wetlands that are actually abutting (i.e., touching) a traditional navigable water are jurisdictional—an approach largely supported by the *Rapanos* plurality when it stated adjacent wetlands must have a "continuous surface connection" with "waters of the United States"[18]—the status of waters that are in close proximity and/or separated by some distance or barriers to navigable waters has been interpreted broadly and inconclusively. Thus, even though a wetland may lie in proximity to a "water of the U.S.," the water is not automatically deemed jurisdictional. As a result, the only clear categories of adjacent waters that are widely accepted as being jurisdictional under the Clean Water Act are wetlands that abut and are contiguous with the traditional navigable waters.

B. EPA and the Corps Issued Guidance to Clarify the *Rapanos* Decision.

In the *Rapanos* plurality decision, Justice Scalia suggested that in order to be jurisdictional, a water of the U.S. must have "relatively permanent water," and adjacent wetlands must have "a continuous surface connection with waters of the U.S."[19] Justice Kennedy concurred in the outcome, but explained that jurisdictional waters are those with a "significant nexus" to traditional navigable waters.[20] On June 5, 2007, the Corps and EPA issued guidance to help make that determination. In short, the guidance states that "a significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters."[21]

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[15] *Id.* at 2231 (Scalia, J.).

[16] 33 C.F.R. §328.3(a)(7).

[17] *Id* at §328.3(c).

[18] *Rapanos*, 126 Sup. Ct. at 2226 (Scalia, J.).

[19] *Id.* at 2225, 2226.

[20] *Id.* at 2248 (Kennedy, J., concurring in the judgment).

The guidance consists of numerous documents – the guidance itself, a memorandum that outlines how the Corps and EPA will cooperate to implement the guidance, a Q & A, an Approved Jurisdictional Determination (JD) Form, and an Instructional Guidebook on how to fill out the JD Form. While the guidance document provides a general outline of what may be considered jurisdictional, it is the Instructional Guidebook that will likely provide the greatest level of detail and insight into the overall on-the-ground implications.

During the first six months implementing the guidance, the agencies will invite public comments on case studies and experiences applying the guidance. The agencies, within nine months from the date of issuance, will reissue, revise, or suspend the guidance after carefully considering the public comments received and field experience with implementing the guidance. In other words, the process undertaken by EPA and the Corps has flexibility to revise the documents and prepare for a rulemaking based on the first 6 months of implementing the guidance on the ground.

C. The Critical Federal/State Balance Must Be Maintained

The very structure of the CWA evidences Congress' desire to ensure that the States' retain their traditional rights to manage water resources within their boundaries. In fact, the CWA specifically states, "It is the policy of Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution [and] to plan the development and use . . . of land and water resources . . . ." The CWA further specifies that "Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for managing water resources."[22]

Congress elected not to regulate all sources of water pollution, leaving the control of runoff from agricultural and silviculture to the states, and excluding groundwater from the CWA's coverage to prevent federal interference with complex state jurisdictional rules. Thus, Congress decided it was improper for the federal government to maintain jurisdiction over every puddle, trickle of water, or activity that may affect a water or wetland.

Instead, Congress tried to strike a careful balance, asserting federal authority where necessary to protect strictly federal interests. The CWA therefore promotes a voluntary federal-state partnership in matters beyond the reach of the federal government, and preserves state authority elsewhere. As a result, the CWA mandates a cooperative approach to addressing pollution through water management programs, not through coercive control of the permitting program.

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[21] U.S. Environmental Protection Agency and U.S. Army Corps of Engineers Legal Memorandum, *Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States*, 1, http://www.epa.gov/owow/wetlands/pdf/RapanosGuidance6507.pdf.

[22] 33 U.S.C. § 1251(b),(g).

The Congressional design of the CWA has been at issue in the courts. The Supreme Court recognized in *SWANCC* that the government's expansive interpretation of what may be regulated "would result in a significant impingement of the States' traditional and primary power over land and water use."[23] A plurality of the Court further admonished the agencies in the *Rapanos* opinion, declaring

> "[T]he extensive federal jurisdiction urged by the Government would authorize the Corps to function as a de facto regulator of immense stretches of intrastate land – an authority the agency has shown its willingness to exercise with the scope of discretion that would befit a local zoning board. We ordinarily expect a 'clear and manifest' statement from Congress to authorize an unprecedented intrusion into traditional state authority."[24]

Furthermore, States have the ability to react to local problems in a manner best adapted to local needs. Per the original intent of the CWA, States must be allowed to exercise their judgment and not be subjected to onerous and unnecessary federal oversight.

An important role of the term "navigable" is to limit (under the Commerce Clause) the authority of the federal government and preserve the intended balance with the States. Deleting the term "navigable" from the statute, or otherwise expanding the scope of the CWA, would call into question this intent, because most waters would be subject to federal control, and there were would be no waters left to state control. Granting the federal government full authority over the smallest streams, ditches or dry washes will preempt traditional state authority over the use of millions of acres of land. By usurping local authority, the federal government will undermine and/or stifle the efforts by State and local governments to find innovative and collaborative solutions. Expanding federal authority also will lead to confusion for governments and citizens alike. If a property contains a newly-defined water of the U.S., State and local governments cannot implement their land use regulations until the federal government approves the local development projects – a violation of the basic principles of federalism.

In an effort to ensure state oversight of State waters, there must be lines drawn to depict where federal authority ends and State responsibility begins. Although that line has become blurry, broadening the reach of the CWA will not protect the States' rights to implement individual land use and water protection issues.

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[23] *SWANCC*, 531 U.S. at 174.

[24] *Rapanos*, 126 S.Ct. at 2224 (2006).

D. Impacts Stemming from Jurisdictional Expansion are Significant
Notwithstanding the efforts that will be needed to harmonize the CWA with other federal statutes, such as the "Rivers and Harbors Act" and the "Oil Pollution Act", any expansion to the jurisdictional scope of the CWA will have immediate and binding consequences on a host of stakeholders. First are the impacts felt by the federal, State and local governments and others, such as landowners, who would be directly affected via new program and/or permit requirements.

Under H.R. 2421, States would be required to adopt additional water quality standards (WQS) and designated uses; monitor and test water quality; and establish TMDLs where necessary. Considering roadside ditches, which would inevitable come under federal jurisdiction, WQS would have to be established for an estimated 3.9 million miles of ditches, regardless of whether those ditches were dry throughout most of the year or were designed as point sources to convey storm water. Similarly, because there are currently 60,000 TMDLs waiting to be developed, adding to that list will only assure more delays and paperwork, not necessarily any cleaner water. States that are authorized to administer the National Pollutant Discharge Elimination System (NPDES) program (45 currently have this authority) would be required to revise their programs to encompass these "new" waters and to regulate any activities that may affect them. States that have their own waters protection programs will also have to analyze their programs to ensure compatibility with the new federal requirements. In addition, States will likely have to work with the local governments to revise their Section 208 waste treatment management plans to ensure consistency with any revised scope of federal jurisdiction.

The burdens faced by local governments will be more varied and more severe because municipalities must both obtain permits and operate pursuant to those permits and administer certain CWA programs (i.e., the Phase II storm water requirements for small municipalities requires them to, at a minimum, establish a permit program to control storm water discharges from construction activities). Because permits will be required for any activity that may adversely impact a water, many municipal operations could be affected, ranging from reshaping or maintaining storm water ditches, to constructing roads or trails, to maintaining ball field and recreational facilities. Municipalities may also have to revise the scope of their permitting programs and/or establish new regulatory schemes to control additional activities. Many municipalities are already struggling to find ways to finance needed infrastructure improvements and extensions to serve their growing populations. The economic impact of any additional federal requirement under the CWA could be severe, and must be studied carefully so as not to create an unfunded mandate.

Following any expansion of the federal government's CWA authority, as referenced above, home builders will directly feel the consequences. At a time when many permitting programs are already overburdened, the additional delays and carrying costs are likely to be significant. Changes to the scope of the CWA could also impact state and/or local land use plans; storm water management requirements; infrastructure planning, installation, and maintenance activities; and construction projects, resulting in costly and lengthy delays, relocations or even prohibitions.

E. Permitting Challenges Are Aggravated
The CWA prohibits the discharge of pollutants into "waters of the U.S." without a permit. The two permitting programs that provide this authorization include Section 402, which applies to "point source discharges," and Section 404, which requires a permit for the "discharge of dredged or fill material." For home builders, these permits are most commonly required for storm water discharges from construction sites (402) and impacts to wetlands (404). In the midst of the debate over which areas and activities may be properly regulated by the CWA, the permitting process continues to get bogged down. Potential permittees remain uncertain as to what information and materials must be included in a "complete" application, and coordination requirements for other agencies continue to get more complex.

Section 402 established the NPDES program, which, although aimed at controlling "point source" discharges of pollution from industrial processes and municipal sewage treatment facilities, also requires a permit for storm water discharges from construction activities (among others). In an effort to quickly permit the thousands of sources affected, EPA developed a series of general permits. Most of these permits allow coverage anywhere from 7 to 60 days after the application is submitted. However, there are several categories of discharges that require individual permits. These can be extensive, require EPA and/or state oversight and take many months to complete.

Most of the Section 402 permitting authority has been delegated to the States, so 45 States currently administer the NPDES program for EPA and issue the permits. EPA still administers the program in the remaining 5 States and plays an oversight role with the state programs. Under this arrangement, the states play the primary role in determining whether jurisdiction exists on any given site and if a permit is needed.

Almost all construction activities, including single home construction on a single lot within a subdivision, require and NPDES permit. Even those sites that are already regulated by another storm water management and/or soil and erosion control requirements, and sites that are located in areas where it rarely rains or where soil conditions generally preclude the discharge of pollutants, must comply with the CWA permit requirements. As a result, the average home builder spends $3,000 per lot to comply with the terms and requirements of this permit. Due to the large number of NPDES permits being issued every year, changes to the scope of jurisdiction will affect these numbers, the ability of the States to effectively administer and enforce the program, and adversely impact housing affordability.

While the Section 404 program does not result in as many permits, the section does place a heavier administrative burden on the Corps because the Corps must review and approve all of the Section 404 permits. The Corps must make decisions regarding wetlands delineations and jurisdictional determinations. In 2003, the Corps evaluated over 86,000 permit applications. Although the Corps' regulations state that District Engineers will decide on all permit applications not later than 60 days after receipt of a complete application, in FY2003, the average time for making individual permitting decisions was 187 days – over three times longer than the intended timeframe.[25] This delay does not include the time it takes to develop the application and supporting documents or the time it takes to deem an application "complete," both of which can place substantial burdens on home builders and other applicants. In fact, the full range of uncertainties associated with the Section 404 permit process, especially those associated with delays and costs, pose one of the biggest challenges for applicants, especially home builders.

The Corps' resources, including personnel and budget, are insufficient to complete the job they have been given, and the public pays the price. Expanding the scope of the Section 404 program would exacerbate these inefficiencies and create additional burdens for activities that are unlikely to truly protect environmentally valuable waters. There is little or no effort underway to improve the permit programs and if efforts like H.R. 2421 succeed without addressing the permitting program, it will have a detrimental effect, because any changes to the areas or activities regulated by the CWA will have significant and immediate adverse effects. More permits will be needed by more project proponents, the agencies will be flooded by additional administrative and enforcement responsibilities, and costs will increase for all stakeholders. All of these results are avoidable by retaining the language of the CWA and improving the permit programs administratively.

III. Constitutional Questions

Congress has certain enumerated powers pursnant to Article I, Section 8 of the Constitution. Generally, when enacting environmental statutes, Congress relies on its power to regulate commerce. Since 1824, it has been well-settled law that Congress' authority over interstate commerce includes the authority to regulate "navigable waters."[26] If the term "navigable" is deleted from the statute, then the boundaries of the CWA's become unclear. This approach is questionable, as it is not clear Congress can expand the scope of the CWA beyond its current boundaries under its authority to regulate commerce. Furthermore, this tactic leads to uncertainty over Congress's authority, which will force the courts to define that authority.

In *United States v. Lopez*, the Supreme Court stated, "[T]he scope of [Congress's] interstate commerce power must be considered in light of our dual system of government and may not be extended so as to embrace effects on interstate commerce so indirect and remote that to embrace them, in view of our complex society, would effectually obliterate the distinction between what is national and what is local and create a completely centralized government."[27] The Court "identified three broad categories of activity that Congress may regulate under its commerce power. First, Congress may regulate the use of the channels of interstate commerce. Second, Congress is empowered to regulate and protect the instrumentalities of interstate commerce, or persons or things in interstate commerce, even though the threat may come only from intrastate activities. Finally, Congress' commerce authority includes the power to regulate those activities having a substantial relation to interstate commerce, *i.e.,* those activities that substantially affect interstate commerce."[28]

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[25] U.S. Army Corps of Engineers Regulatory Program Permit Trends – FY 1998 - FY 2003, Standard Permits Issued, located at http://usace.army.mil/cw/cecwo/reg/2003webcharts.pdf.

[26] *See Gibbons v. Ogden*, 22 U.S. (9 Wheat.) 1, 190 (1824).

[27] *United States v. Lopez*, 514 U.S. 549, 556-57 (internal quotation omitted); *see also United States v. Morrison*, 529 U.S. 598, 617-18 ("The Constitution requires a distinction between what is truly national and what is truly local.").

There is no question that Congress has the authority to regulate "navigable waters" for purposes of navigation and Congress intended in the CWA to exercise its power over navigation, or the "channels of interstate commerce."[29] The Supreme Court long ago held that "navigation" is inherent in "commerce."[30] Congress's power over navigation includes the power to control "*for that purpose* ... all the navigable waters of the United States which are accessible from a State other than those in which they lie."[31] The navigable waters include those waters that are now, that have been in the past, or that may with reasonable improvements be used by vessels in interstate or foreign commerce, as well as waters subject to the ebb and flow of the tide.[32]

Furthermore, Congress's power over navigation includes the power to regulate activities occurring outside the navigable waters "in order to preserve or promote commerce on the navigable portions."[33] For example, the Supreme Court has approved the regulation of the construction of a dam outside the navigable waters that had diverted the entire flow of a river, in order to protect "the navigable capacity of one of the navigable waters of the United States."[34] Under this reasoning, it is reasonable for Congress to regulate certain *nonnavigable* waters if those waters will affect the ability of navigable waters to be used for commerce.

Congress may also "regulate activities that substantially affect interstate commerce."[35] In *Gonzales v. Raich*[36], the Court addressed whether Congress could Constitutionally regulate the local growth and use of majijuana for medical purposes. The Court provided that Congress may regulate local activities if they are they "are part of an *economic* 'class of activities'" and "if it concludes that failure to regulate [the local] activity would undercut the regulation of the interstate market in [a] commodity."[37] "Economics refers to the production, distribution and consumption of commodities."[38]

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[28] *Lopez,* 514 U.S. at 558-59 (internal citations omitted)

[29] *See SWANCC,* 531 U.S. at 168 & n.3.

[30] *Gibbons,* 22 U.S. (9 Wheat.) at 190.

[31] *Gilman v. Philadelphia, 70 U.S. (3* Wall.) 713, 724-25 (1866) (emphasis added).

[32] *See The Daniel Ball,* 77 U.S. 557, 563 (1870); *United States v. Appalachian Electric Power Co.,* 311 U.S. 317, 407-09 (194); *Economy Light & Power Co. v. United States,* 256 U.S. 113, 123 (1921).

[33] *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.,* 313 U.S. 508, 523 (1941).

[34] *United States v. Rio Grande Dam & Irrigation Co., 174* U.S. 690, 708 (1899).

[35] *Gonzales v. Raich,* 545 U.S. 1, 17 (2005).

[36] *Id.*

In applying its rule, the Court explained that, in *Wickard v. Filburn*[39], it upheld the regulation of a single farmer's wheat (that he would use for home consumption) because the regulations "were designed to control the volume of wheat moving in interstate . . . commerce."[40] Similarly in *Raich*, the Court allowed for the regulation of home grown and consumed marijuana, for personal medical use, because home consumption "would . . . affect price and market conditions" of "an established, albeit, illegal interstate market."[41] Thus, in both *Wickard* and *Raich* the Court upheld Congress's authority to control purely intrastate activities when those activities threatened its regulation of a national market.

However, the stated purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters" and eliminate the "discharge of pollutants." It is not clear that the CWA's purpose is to regulate *any* "economic" activity, as the Supreme Court has described the term, because regulating the discharge of pollutants is not equivalent to regulating "the production, distribution and consumption" of a "commodity."[42] Furthermore, the regulation of pollution is very different from the "markets" that Congress regulated in *Raich* and *Wickard*. Based on the differentiation from those cases, it is questionable whether the Court would sustain an expansion of the CWA, as proposed in H.R. 2421, under Congress's power to regulate activities that substantially affect interstate commerce.

Given the lingering questions and uncertainties associated with the expansion of federal CWA jurisdiction, it is likely that courts, instead of the agencies, will end up making jurisdictional decisions. Decisions by the courts would most likely be made on a constitutional basis instead of with an environmental focus. This result would contrast with the CWA's goal of protecting and preserving the nation's waters.

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[37] *Id.* at 17-18 (emphasis added).

[38] *Id.* at 25 (internal citations omitted).

[39] 317 U.S. 111 (1942).

[40] *Raich*, 545 U.S. at 19.

[41] *Id.* at 18-19.

[42] *Id.* at 25.

IV. Conclusion

In conclusion, the Clean Water Act is imperative to the continued protection of the nation's waters and the National Association of Home Builders supports efforts to clarify confusion surrounding the implementation of the statute. Home builders need a program that is consistent, predictable and timely. However, the changes proposed in H.R. 2421, the "Clean Water Restoration Act," would create more confusion for home builders and other stakeholders. The removal of the word "navigable" and the broad definition of "waters of the United States" will only increase the uncertainties surrounding jurisdictional determinations and exacerbate the difficulties with the permitting program. The guidance issued by the Corps and EPA in response to the confusing *Rapanos* decision is a step in the right direction because a regulatory fix, not a legislative fix, is a better approach for addressing the problems with the statute. NAHB commends the committee for holding a hearing on this topic, but strongly urges the committee to carefully review legislation, like H.R. 2421, that expands the CWA beyond the framework developed over the past thirty years.

Comments of the National Mining Association

Hearing on the Status of the Nation's Waters, including Wetlands, Under the
Jurisdiction of the
Federal Water Pollution Control Act

Submitted to the

Committee on Transportation and Infrastructure

United States
House of Representatives

July 17, 2007

Introduction:

The National Mining Association (NMA) appreciates this opportunity to provide comments on the important public policy issues related to the scope of federal jurisdiction under the Clean Water Act (CWA). NMA is a trade association representing producers of most of America's coal, metals and industrial and agricultural minerals. NMA member mining operations are located throughout the country, in a variety of geographic regions and in nearly every U.S. Army Corps of Engineers District.

Mining companies have unique technological, logistical and economic challenges due to the fact that mineral resources are fixed in location and mining operations must be located where the mineral is located. Depending upon geographical conditions, climate and terrain, mining operations encounter "waters of the United States" throughout the course of development. The nature and extent of these "waters" will vary significantly. For example, many mines are located in extremely remote and arid regions. It is not uncommon for drainage features in these areas to rarely flow and, even then, only in response to a substantial storm event. Similarly, many sites cover vast amounts of acreage and are located in the vicinity of irrigation canals, drainage ditches and similar water management systems.

Unlike any other industry regulated under the Corps' CWA Section 404 program, the mining industry is already subject to federal and state regulatory regimes that include rigorous regulatory obligations designed to prevent or minimize mining-related environmental impacts, including impacts to aquatic resources. The Federal Land Policy and Management Act (FLPMA), 43 U.S.C. 1701 *et seq.* (1976) (amended in 1988), which regulates minerals mining on federal lands, and the Surface Mining Control and Reclamation Act (SMCRA), 30 U.S.C. 1201 *et seq.* (1977) which regulates surface coal mining, provide two examples of such robust federal environmental statutes. The overarching environmental requirements of land management statutes and mining-related statutes are supplemented by numerous federal, state and local environmental programs established, for example, under the Clean Air Act, the Resource Conservation and Recovery Act and the CWA. Consequently, in addition to the environmental stewardship obligations under FLPMA, or the detailed planning and reclamation provisions of SMCRA, mine operators must, consistent with the CWA, obtain a permit for a discharge of a pollutant from a point source to navigable waters, e.g., those subject to CWA jurisdiction. Consistently, permits must be obtained for discharges of fill material of support facilities, access roads, pipelines and a host of other commonplace mine-related activities.

Congress Should Not Rush to Change the Jurisdictional Reach of the CWA:

While it is true that the jurisdictional lines of the CWA have become blurred as the Corps' Section 404 regulatory program evolved over time and that the Supreme Court decision, in *Rapanos v. United States,* failed to set forth one clear standard for CWA jurisdiction, the unifying theme of all the justices was not that the CWA needed to be amended but rather that the Corps and the U.S. Environmental Protection Agency (EPA) should issue new regulations. Indeed, the Corps and EPA recently took an important first step in this direction by issuing new regulatory guidance for the purpose of integrating the *Rapanos* decision into the agencies' regulatory programs under the CWA. The agencies also announced they would provide an opportunity for public comment and that the guidance may be revised in response to comments provided by the public with regard to its application. NMA believes this is an appropriate and necessary step toward clarifying CWA's scope. It is also critical that we recognize it will take some time to evaluate the utility of the newly issued guidance. Congress should not now change CWA jurisdiction in the midst of this process. To do so would only serve to create additional confusion.

NMA Does Not Support the Drastic Expansion of CWA Jurisdiction Proposed by H.R. 2421:

The Clean Water Restoration Act (CWRA) of 2007 (H.R. 2421), introduced by House Transportaion and Infrastructure Committee Chairman James Oberstar (D-Minn.), would expand federal CWA jurisdiction to virtually all wet areas in the United States. NMA believes such a drastic expansion of jurisdiction is contrary to Congress' intent when it enacted the CWA in 1972. The purpose or need for such a drastic expansion of federal jurisdiction has not been articulated to date nor have the practical impacts of such a significant change been fully considered.

In addition to expanding the scope of federal CWA jurisdiction to many waters currently considered within the purview of the state regulatory authority, the CWRA would also authorize such regulation "to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution." Expanding the definition to include "activities affecting waters" goes well beyond the current reach of the CWA, which is limited to regulation of discharges to waters from point sources under section 402 and discharges of dredged or fill material under section 404. Indeed, this language can and will be read broadly to allow the regulation of all activities that may "affect" waters. In other words, regardless of whether an activity is discharging a pollutant from a point source or discharging dredged and fill material into a water of the United States, the fact that an activity may impact a "water of the United States" would subject that activity to CWA regulation. This marks a profound change to the current regulatory framework.

The legislation would regulate activities affecting these waters "to the fullest extent" of Congress' authority under the Constitution. This is an expansion of the existing CWA and its regulations, which tie the authority to regulate to Congress' authority to regulate commerce under the Constitution's Commerce Clause. While the Commerce Clause authority is wide, the outer bound of "the fullest extent of Congress' authority under the Constitution" is certain to be much broader. For example, anything subject to the Treaty Power or reachable through the Property Clause and the Necessary and Proper Clause, or other parts of the Constitution, could provide a basis for jurisdiction under the proposed legislation. The reach of such power is far from clear. Supreme Court justices and constitutional scholars have been debating the scope of each of these constitutional clauses since 1789. NMA questions not only the need to open the door so wide but also the wisdom of such a substantial change in the statute.

The expansion goes even further and eliminates the Corps' and EPA's long-standing regulatory framework that recognizes certain regulatory exclusions, such as waste treatment systems. For the mining industry, the use of sediment ponds as best available technology (BAT) for meeting water quality standards is not only a requirement of SMCRA, but also considered BAT by EPA. Clearly, there is no evidence that any thought has been given to how industries that rely on sediment pond technology for meeting water quality standards will comply with state and federal water quality laws and regulations going forward.

Finally, the CWRA places a huge burden on states and local governments, even the federal government and the regulated community. When read in tandem with other sections of the statute that apply to waters of the United States, the legislation would impose significant new administrative responsibilities and likewise increase the costs that go with these responsibilities. Additional costs imposed on regulated industries will come through increased permitting delays and the resulting economic impact that will have on commercial and residential real estate development, agriculture, electric transmission, transportation and mining to name just a few. None of these costs have been considered.

Conclusion:

Inclusion of the word navigable in the original Clean Water Act recognized that a line existed between state and local jurisdiction and federal jurisdiction in administering water resources. By removing the word navigable, H.R. 2421 will vastly expand federal jurisdiction and take many local land and water use decisions away from the local governing bodies traditionally charged with planning for their local communities.

All nine justices in the *Rapanos* decision declared the finer points of CWA jurisdiction could only be addressed by and decided through the regulatory process and not through new legislation. While the recently issued guidance may not be perfect, allowing the regulatory process to go forward is the only way to deliver regulatory certainty as well as delineate jurisdiction in a way to maximize wetlands protection. Ultimately, a partnership between the states and federal government will be the best way to focus protection on those wetlands that are truly important while continuing to give states and localities the authority to make decisions on local development issues in their communities.

For more information please contact Rich Nolan, Hewitt Strange, or Karen Bennett at the National Mining Association.

The Nature Conservancy
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Steven J. McCormick
President and Chief Executive Officer

WR

RECEIVED
JUL 05 2007
By

June 21, 2007

Dear Member of Congress:

I am writing to ask you to support the Clean Water Restoration Act (H.R. 2421). This bi-partisan legislation, which was introduced by Representatives Oberstar, Dingell and Ehlers along with over 160 cosponsors, is critical to the protection of our nation's water resources.

The U.S. has lost over 50% of its original wetlands, but thankfully, the protections afforded under section 404 of the Clean Water Act have stemmed this decline and have helped restore water resources that are critically important for both people and nature. Recent Supreme Court decisions have questioned the intent of Congress in the Clean Water Act to protect non-navigable waters, and have left great uncertainty as to the types of waters protected under the Act. This uncertainty threatens many streams and wetlands that are important for fish and wildlife habitat, flood protection and recreation and makes an already overburdened regulatory process even more cumbersome.

Waters most at risk of losing federal protections because of legal challenges include geographically isolated wetlands such as prairie potholes and playa lakes as well as headwater and seasonal streams and nearby wetlands. These streams and wetlands provide habitat for hundreds of at-risk species -- geographically isolated wetlands alone harbor over 80 federally listed species – as well as a variety of fish and wildlife important for hunting, fishing and economic production. Congressional action is needed to clarify the intent of the Clean Water Act and to continue protection of these important resources.

We recognize that the regulatory process for protecting wetlands, rivers and streams is far from perfect. Many of the regulated community's complaints about permitting delays and increased costs are valid and need to be addressed. Therefore, any legislation that clarifies Clean Water Act jurisdiction should also implement reforms to the section 404 permitting process that ensures protection for wetlands and streams while improving the predictability and reliability of permitting.

On behalf of The Nature Conservancy's one million members, I urge you to support this important legislation.

Sincerely,

The Nature Conservancy
SAVING THE LAST GREAT PLACES ON EARTH

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Statement of Nat Williams
Director of U.S. Government Relations
Before the Committee on Transportation and Infrastructure
September 24, 2007

Mr. Chairman and members of the Committee, thank you for the opportunity to testify on the status of the nation's waters. We believe legislation to clarify Congress' intent in the Clean Water Act is needed. Therefore, we support H.R. 2421, the Clean Water Restoration Act, which would clearly define those waters that are within the jurisdiction of the Act.

The Nature Conservancy is an international, nonprofit organization dedicated to the conservation of biological diversity. Our mission is to preserve the plants, animals and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. Our on-the-ground conservation work is carried out in all 50 states and in 30 foreign countries and is supported by approximately one million individual members. The Nature Conservancy has protected more than 117 million acres of land and 5,000 miles of river around the world. Our work also includes more than 100 marine conservation projects in 21 countries and 22 US states.

The Conservancy owns and manages approximately 1,400 preserves throughout the United States—the largest private system of nature sanctuaries in the world. We recognize, however, that our mission cannot be achieved by core protected areas alone. Therefore, our projects increasingly seek to accommodate compatible human uses by helping local landowners and community leaders sustain our working landscapes.

Federal Protection of Wetlands and Streams

With its goal of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters, the Clean Water Act is one of our best tools for protecting and restoring our nation's aquatic ecosystems. For over 30 years, the Act has improved water quality and afforded regulatory protection for headwater streams and wetlands that provide important habitat for fish and wildlife as well as services to humans such as flood protection and clean water. However, recent Supreme Court decisions have questioned the Act's extent and caused confusion that threatens many of these wetlands and streams.

Following the Supreme Court's 2001 SWANCC decision (*Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers*) and the agencies' subsequent guidance, Clean Water Act jurisdiction over non-navigable, isolated, intrastate waters was significantly curtailed. These isolated waters that are no longer protected by the Act include biodiversity-rich wetland habitats such as prairie potholes and playa lakes. In June 2006, the Supreme Court overturned by plurality decision two lower court cases that upheld Corps of Engineers jurisdiction over non-navigable tributary waterways and adjacent wetlands (*Rapanos v. United States* and *Carabell v.*

U.S. Army Corps of Engineers). The court's inability to reach a majority decision in this case has left much confusion and puts many ecologically important streams and wetlands at risk.

As a result of these cases, the extent of Clean Water Act jurisdiction over many ecologically important isolated wetlands has been curtailed and jurisdiction over other wetlands and tributary waterways is uncertain. Individual Corps districts must now take a case-by-case approach in asserting jurisdiction, requiring significant resources and time. However, the lack of adequate resources to establish a significant nexus on a case-by-case basis and the uncertainty of establishing jurisdiction based on recent Supreme Court decisions creates the potential for significant wetland acreage and stream miles to lose protection under the Clean Water Act and for an increase in permitting delays.

Estimates of waters that will no longer be subject to federal jurisdiction because of the SWANCC decision alone range from approximately one-fifth to one-half of wetland acreage nationwide. In the Great Lakes region, for example, one-third of wetland acres are projected to lose CWA protection, but for some wetland types, the loss of federal protection is projected to be even greater. For example, in the Playa Lakes region of Texas all playas stand to lose federal protection because of their geographically isolated nature.[1]

Seventeen states, primarily located in the Northeast, Mid-Atlantic and Great Lakes regions, have strong regulatory programs that protect all wetlands, including isolated wetlands. However, twenty-nine states lack regulations to protect isolated wetlands and other headwater streams. As a result, the federal 404 program provides the primary regulatory tool for protection of wetlands and streams in many states, and we must ensure that this tool maintains the ability to safeguard our most precious aquatic resources.

Congressional action is needed to bring clarity and reestablish protection for our most critical aquatic resources. H.R. 2421 offers a simple fix by clearly stating congress' intent to restore the Clean Water Act protections that existed prior to the *SWANCC* ruling in 2001. The bill draws on long-established practice and regulation by defining "waters of the United States" in a manner nearly identical to the definition used in Corps of Engineers and Environmental Protection Agency regulations for over 30 years.

Importance of Wetlands and Headwater Streams

The biodiversity found in wetlands is comparable to the biodiversity found in tropical rainforests or coral reefs. Wetlands are critical to the survival of many species of amphibians, reptiles, mammals, fish, plants, and especially birds. While wetlands cover only five percent of land area in the United States, 31 percent of our plant species are found in wetlands. Wetlands also provide habitat needed by a number of species with significant economic and recreational importance. For example, of the 10 to 12 million waterfowl in the continental United States, two-thirds reproduce in the prairie pothole wetlands of the Midwest. Additionally, approximately 70 percent of the United States' commercial and recreational fishing industry consists of wetland-dependent fish and shellfish species.[2] Wetlands also provide significant socio-economic services, such as storing water during floods, filtering the water supply, stabilizing stream banks and providing recreational and educational opportunities.[3]

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[1] Ducks Unlimited, The SWANCC Decision: Implications for Wetlands and Waterfowl (September 2001).

[2] U.S. Environmental Protection Agency, Functions and Values of Wetlands (September 2001), EPA 843-F-01-002c

Despite their rich biodiversity and economic value, wetlands continue to be damaged or destroyed. Nationwide, approximately 60,000 acres of wetlands are converted each year. More than half of the estimated 220,000 acres of wetlands that originally existed in the lower United States have been drained, filled, or otherwise converted. Twenty-two states have already lost at least half of their original wetlands.[4] Furthermore, the wetlands that remain are often created or are in poor condition in comparison with wetlands that have been lost.

Isolated wetlands, which are those that will likely lose some degree of federal protection in the wake of the SWANCC and Rapanos cases, are particularly rich in biodiversity. A 2005 study by NatureServe[5] quantifies the tremendous biodiversity supported by geographically isolated wetlands. Of 276 wetland ecological systems found in the United States, this study identified a total of 81 (29 percent) distinct types of wetlands that tend to be geographically isolated from navigable waters and thus likely outside the jurisdiction of Section 404 of the Clean Water Act based on the SWANCC decision. These 81 wetland types support:

- 274 species of at-risk[6] plants and animals, with 35 percent of these species found only in isolated wetlands;
- 86 plant and animal species listed as threatened, endangered or candidates under ESA, with 52 percent found only in isolated wetlands; and
- 279 at-risk vegetation associations, with 67 percent of these associations found only in isolated wetlands.

Wetlands are a significant component of the Conservancy's conservation efforts. Twenty percent of the total number of conservation areas in which the Conservancy has worked involve some wetland component. This includes the protection through fee or easement of more than 1.8 million acres of tracts with wetlands. We have used a variety of tools such as the North American Wetland Conservation Act and other voluntary programs to achieve these results, but to achieve landscape-scale conservation of ecologically important aquatic resources, it is our experience that these critical voluntary conservation efforts should be coupled with a common-sense regulatory program that protects our most ecologically valuable wetlands and streams.

Section 404 Regulation

We recognize that the regulatory process for protecting wetlands, rivers and streams is far from perfect. Many of the regulated community's complaints about permitting delays and increased costs are valid and need to be addressed. Therefore, we support coupling legislation that clarifies Clean Water Act jurisdiction with reforms to the section 404 permitting process to ensure protection for wetlands and streams while improving the predictability and reliability of permitting. Furthermore, we believe that existing exemptions established in section 404 of the Clean Water Act, e.g. farming and silvicultural activities, should be maintained and applaud the inclusion of a savings clause in H.R. 2421 to clarify that existing statutory exemptions will not be affected.

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[3] National Wildlife Federation & Natural Resources Defense Council, Joint Report, Wetlands at Risk: Imperiled Treasures (July 2002), available at http://www.nrdc.org/water/conservation/atrisk/wetlands.pdf

[4] Thomas E. Dahl, U.S. Fish & Wildlife Service: Status and Trends of Wetlands in the Coterminous United **States,** 1986 to 1997, 9 (2000).

[5] NatureServe, Biodiversity Values of Geographically Isolated Wetlands in the United States (December 2005), available at http://www.natureserve.org/publications/isolatedwetlands.jsp.

[6] At-risk species are defined as rare, imperiled or critically imperiled species using NatureServe's standard criteria.

The goal of any regulatory program should be to protect those resources that are most critical to restore the chemical, physical and biological integrity of the nation's waters. This includes waters that may be isolated, non-navigable or that do not permanently flow, such as playa lakes and prairie potholes. We support the Clean Water Restoration Act for clarifying Congress' intent to protect these important resources and call on Congress to take action to address this critical issue.

We appreciate your consideration of these comments. If you have any questions, please feel free to contact me or Jason Albritton (jalbritton@tnc.org, 703-841-4105) on my staff.

Natural Resources Defense Council · Sierra Club · Earthjustice
American Rivers · National Audubon Society
U.S. PIRG · Southern Environmental Law Center
Environmental Integrity Project · Clean Water Action

July 19, 2007

The Honorable James L. Oberstar, Chairman
The Honorable John Mica, Ranking Member
House Committee on Transportation and Infrastructure
United States House of Representatives
Washington, DC 20515

RE: House Committee on Transportation and Infrastructure Hearing on the Status of the Nation's Waters, Including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Dear Chairman Oberstar and Ranking Member Mica:

Thank you for holding hearings on the Clean Water Act and the impact of the U.S. Supreme Court's decisions in the *Rapanos* and *SWANCC* cases on the Nation's water resources that the Act is designed to protect. We are grateful that the Committee is taking this first step towards Congressional action this session to reaffirm and clarify scope of the Clean Water Act's protections. We ask that this letter, discussing our analysis of the *SWANCC* and *Rapanos* decisions, the effects they may have in regulating polluting activities in the waters of the United States, and the immediate need for a Congressional response, be entered into the record for today's hearing along with the documents that are attached.

The federal Clean Water Act is one of the Nation's most important, effective and popular environmental laws. The law's popularity is not surprising, as most Americans expect to have safe drinking water, clean beaches, flood protection, fish and wildlife habitat, economic development, and overall community health – all values that the Clean Water Act safeguards. While it has not yet achieved Congress's goal of making all of the Nation's waters safe for swimming, fishing, and other purposes, the Act has made tremendous progress towards this end over the last three decades. We know that the Committee will keep this basic premise in mind as it considers how to respond to the Supreme Court's *SWANCC* and *Rapanos* decisions.

Our organizations collectively represent millions of Americans who strongly support the continued effective implementation of the Clean Water Act. Accordingly, we urge Congressional passage of the Clean Water Restoration Act (H.R. 2421) to reaffirm longstanding federal safeguards for all of the Nation's waters, including streams, wetlands, lakes, rivers, and coastal waters. In this testimony, we explain why this legislation is so important to the future health and safety of these waters.

Today, the stakes couldn't be higher for the Clean Water Act. The law has one definition of "waters of the United States" that defines the geographic scope of many of the Act's provisions: the general prohibition against discharging pollutants into waters without a permit (§ 301); the law's two major permitting programs, the National Pollution Discharge Elimination System permits (§ 402) and the dredge and fill permits (§ 404); water quality standards and total maximum daily loads (§ 303); the oil spill prevention and liability provisions (§ 311); and more. *See, e.g.,* Brief of the U.S. Gov't in *Rapanos* at 20 (the term 'waters of the United States' "defines the scope of regulatory jurisdiction to be exercised under other provisions of the CWA.").

Because the Supreme Court's decisions in the *SWANCC* and *Rapanos* cases – as well as the EPA's and Corps' subsequent interpretations of those decisions in guidance to field staff – are interpreting the meaning of the statutory term "waters of the United States," they have important implications for all of the Nation's waters and all forms of pollution from point sources that are covered by the law.

This testimony covers several major points, including: the importance of clean water to the Nation's health and prosperity, especially the importance of the tributaries and wetlands currently at greatest risk of pollution and destruction from loss of Clean Water Act jurisdiction; the historic, broad scope of the 1972 Clean Water Act; the implications of the *SWANCC* and *Rapanos* decisions and the EPA and Corps policy guidance issued in the wake of those cases; the need for a Congressional response; and finally, why the Clean Water Restoration Act is the best and most appropriate action for Congress to take to keep the Clean Water Act's promise of safe and healthy waters for all Americans.

We trust this testimony and the information it provides will be helpful to the Committee in its deliberations on this issue. Your work is vital to the health of our Nation's communities today and for future generations.

Clean Water Is a Necessity

Water is one of our most precious national assets. As a recent EPA draft report on the state of the environment observes:

> The nation's water resources have immeasurable value. These resources encompass lakes, streams, ground water, coastal waters, wetlands, and other waters; their associated ecosystems; and the human uses they support (e.g., drinking water, recreation, and fish consumption). The *extent* of water resources (their amount and distribution) and their *condition* (physical, chemical, and biological attributes) are critical to ecosystems, human uses, and the overall function and sustainability of the hydrologic cycle.

U.S. EPA, EPA's 2007 Report on the Environment: Science Report, External Review Draft, at 3-6 (May 2007).

When Congress passed the Federal Clean Water Act Amendments of 1972, it broadly defined the water resources to be protected, recognizing that "[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled *at the source*") S. Rep. No. 92-414, p. 77 (1972). This was a wise and elegant marriage of science and law; because all water bodies serve important functions in the natural environment and are part of an overall hydrologic system, the scope of the law had to be as broad in order to be effective. If the scope was not broad, then the goals of the law could not and would not be met.

As scientists have overwhelmingly documented, small streams and wetlands perform essential roles in our environment, storing floodwater, filtering out and processing pollutants that would contaminate downstream waters, and providing critical habitat for many species of fish and other aquatic life. Safeguarding these waters from pollution is fundamentally important to keeping our drinking water sources clean and minimizing flood risks in our communities.

The February 2007 issue of *Journal of the American Water Resources Association* focuses on this issue by enlisting some of the foremost experts on America's waterways to discuss what role headwaters play in the overall status and safety of the Nation's water supply by maintaining the physical, chemical and biological integrity of downstream waters. As an article summarizing the collection observes:

> [S]cientific evidence does not support the existence of a bright line separating headwater streams from downstream waters within these integrated hydrological systems. Via hydrological connectivity, headwater, intermittent and ephemeral streams cumulatively contribute to the functional integrity of downstream waters; hydrologically and ecologically, they are a part of the tributary system.

Tracie-Lynn Nadeau & Mark Cable Rains, *Hydrological Connectivity Between Headwater Streams and Downstream Waters: How Science Can Inform Policy*, Journal of the American Water Resources Association, 118, 129 (Feb. 2007).

Similarly, the September 2003 issue of the *Journal of the Society of Wetlands Scientists* (available at http://www.sws.org/wetlands/journalsearch.mgi?t=233) contained numerous studies documenting the functions performed and values provided by wetlands, including so-called "isolated" wetlands. One article predicted the extent of isolated wetlands in 72 study areas based on a U.S. Fish and Wildlife Service (FWS) survey. The study sites included areas where specific types of "isolated" wetlands were expected to occur (including Prairie Pothole marshes, playas, Rainwater Basin marshes and meadows, terminal basins, sinkhole wetlands, Carolina bays, and West Coast vernal pools). The study found that isolated wetlands constituted a significant proportion of the wetlands resource across the country: eight study areas had more than half of their wetland area designated as isolated, while 24 other areas had 20-50 percent of their wetland area in this category. Ralph W. Tiner, *Geographically Isolated Wetlands of the United States*, (Sept. 2003) (available at http://www.sws.org/wetlands/journalsearch.mgi?t=233). These wetlands perform many of the same functions as wetlands that are not considered to be geographically "isolated" from other waters.

In another example, EPA studies have drawn the connection between upstream wetlands and headwaters in the Chesapeake Bay watershed and the physical, chemical, and biological integrity of the Chesapeake Bay and its navigable tributaries downstream. These EPA Region III studies that encompass the Chesapeake Bay watershed show that headwater streams (first and second order streams) comprise about half of the many streams in the Bay watershed, and about half of these headwater streams flow intermittently at times. *Consolidated EPA Region III Response to the Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "waters of the United States"* at 10, Appendix E at 3 (2003) (attached). The EPA Region III studies show that about 36% of the area's remaining wetlands are associated with headwaters. So, the watershed's non-navigable streams and adjacent wetlands comprise a large percentage of the watershed's hydrologic system.

Similarly, EPA Region III compiled studies within the Chesapeake Bay watershed demonstrating that many of these remaining wetlands remove up to 90% of nitrogen and phosphorus pollution from runoff. *Id.*, Appendix D at 13-14. Nitrogen and phosphorus pollution cause eutrophication, the most significant threat to Chesapeake Bay watershed restoration. *See, e.g., Chesapeake 2000 Agreement, Water Quality Protection and Restoration*, at 5 (available at http://www.chesapeakebay.net/agreement.htm).

Nationwide, smaller streams are a significant percentage of the overall hydrologic system. According to the U.S. Environmental Protection Agency (EPA), first-order ("start reach") streams comprise 53 percent of total stream miles, and intermittent (including ephemeral) streams comprise 59 percent of the total.[1] Over 100 million Americans get their drinking water from public supply systems that intake water from these streams; in 27 states, more than 1 million residents get drinking water from these streams.[2] These headwater and intermittent streams also are utilized as discharge points for wastewater for over 14,000 industrial and municipal facilities with individual NPDES permits under the Clean Water Act.[3] If federal anti-pollution safeguards for these streams are significantly constricted, pollution could jeopardize public health as well as the physical, chemical, and biological integrity of these waters.

The Jurisdictional Scope of the Clean Water Act Is Broad

It is clear that the intent of Congress when passing the Clean Water Act was to embrace the broadest possible definition of "navigable waters" when it defined that term as "all waters of the United States."

By the 1960s, the deterioration of the Nation's waters was alarmingly evident. Symbolic of their disastrous state was the Cuyahoga River, running through Cleveland, Ohio into Lake Erie. It became so polluted with industrial waste in the 1950s and 1960s that it caught fire on more than one occasion. Lake Erie itself became so polluted from municipal and industrial waste and agricultural runoff that it supported algae blooms forty miles long and was projected to become biologically dead. Spills off the coast of California blanketed hundreds of miles of coastline with oil. Waterways in many cities across the country were reduced to nothing more than sewage receptacles for industrial and municipal waste. The rate of wetlands loss was approximately

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[1] *See* Letter of January 9, 2006 (mistakenly date stamped January 2005) from Benjamin Grumbles, Assistant Administrator of EPA.

[2] *See* attached, "Table 1: State by State NHD Analyses of Stream Categories and Drinking Water Data" (prepared by U.S. EPA).

[3] *See* attached, " State by State Analyses of Individual NPDES Permits on NHD Intermittent/Ephemeral and "Start Reach" Streams That Have Location Data in PCS" (prepared by U.S. EPA).

450,000 acres per year.[4] Leaving the problem to individual states to resolve and piecemeal federal law was an approach that was clearly not working.

Public outcry demanded a strong response. There was a general – and accurate – perception that past approaches relying on state-by-state water quality standards alone was not cleaning up the waters and, indeed, waters were becoming more polluted. There was clearly a need for a broader federal role to address water pollution.

Legislative History Confirms the Intended, Broad Scope of Protection

And Congress responded. The 1972 Act was hailed as the first truly comprehensive federal water pollution legislation. Congressman Blatnik, Chairman of the House Public Works Committee, characterized it as a "landmark in the history of environmental legislation." 2 Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1, 1269 (1973). Senator Randolph, Chairman of the Senate Committee on Public Works said, "[i]t is perhaps the most comprehensive legislation that the Congress of the United States has ever developed in this particular field of the environment." *Id.*

The law's comprehensive nature was largely in recognition that existing water pollution laws were a failure. As Senator Edmund Muskie told the Senate when introducing the bill that was to become the new Clean Water Act: "The committee on Public Works, after 2 years of study of the Federal water pollution control program, concludes that the national effort to abate and control water pollution is inadequate in every vital aspect." 117 Cong. Rec. 17397 (daily ed. Nov. 2, 1971) (emphasis added).

The very first sentence of the 1972 statute states "The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251.[5] To achieve this objective, Congress adopted a general prohibition on discharging pollutants from point sources into "navigable waters" without a permit 33 U.S.C. §§ 1311(a), 1362(12), and gave the fullest effect to this and other provisions of the law by defining that term as "waters of the United States." 33 U.S.C. § 1362(7).

Both the House and Senate versions of the bills to amend the Federal Water Pollution Control Act (FWPCA) were written to expand federal authority to control and ultimately eliminate discharges of water pollution across the country.[6] Both the House and Senate sought to restructure the nation's federal authority to control water pollution while drawing upon much of the language of earlier versions of the FWPCA as well as the Rivers and Harbors Act (RHA).

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[4] Frayer et.al. "Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950s to 1970s," USFWS National Wetlands Inventory (April 1983).

[5] The House report explains, "The word 'integrity'... is intended to convey a concept that refers to a condition in which the natural structure and function of ecosystems is maintained." H.R. Rep. No. 92-911 at 76-77 (1972). Similarly, the Senate report stated, "Maintenance of such integrity requires that any changes in the environment resulting in a physical, chemical or biological change in a pristine waterbody be of a temporary nature, such that by natural processes, within a few hours, days or weeks, the aquatic ecosystem will return to a state functionally identical to the original." 1972 U.S.C.C.A.N. at 3742.

[6] H.R. 11896, 92nd Cong. (1971); S. 2770 92nd Cong (1971).

Thus, in their respective bills, both bodies initially borrowed the term "navigable waters" from the RHA, and included a definition that itself used the term "navigable."[7]

However, in the reports discussing their respective versions of the legislation, both the House and Senate expressed concern about potential narrow interpretations of which waters they intended to be covered by the Act.

The House Public Works Committee stated its concern as follows:

> [O]ne term that the Committee was reluctant to was define the term "navigable waters." The reluctance was based on the fear that any interpretation would be read narrowly. However, this is not the Committee's intent. The Committee fully intends that the term "navigable waters" be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes.[8]

The Senate Committee on Public Works stated:

> Through a narrow interpretation of the definition of interstate waters the implementation of 1965 Act was severely limited. Water moves in hydrologic cycles and it is essential that discharges of pollutants be controlled at the source.[9]

While the House report focused upon the need for a broad constitutional interpretation of the Act's scope, and the Senate report spoke to the scientific reality of waters being interconnected, both bodies signaled their desire not to constrain the reach of the Act to those waters previously protected primarily on the grounds of navigability.

When the House and Senate met in conference committee, they took an additional step to ensure that the definition of "navigable waters" did not result in unduly narrow interpretations. As discussed in the report of the Conference Committee, the House version of the definition was accepted into the final bill, but the word "navigable" was deleted from the definition. Thus, the new definition read as follows: "The term 'navigable waters' means waters of the United States, including the territorial seas."[10]

The Conference report spoke to this change, using the exact terminology of the earlier House Public Works Committee report in confirming that the term "must be given the broadest constitutional interpretation," and expressing that the interpretation of this definition must be "unencumbered by agency determinations which have been made or may be made for administrative purposes."[11]

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[7] In the Senate, the earlier definition read "the term navigable waters means the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes. S. 2770, 92nd Cong. § 502(h) (1971). The House bill's initial definition read, "The term 'navigable waters' means the navigable waters of the United States, including the territorial seas." H.R. 11896, 92nd Cong. § 502(8) (1971).

[8] H.R. Rep. No. 92-911 at 131 (1972).

[9] S. Rep No. 92-414 at 77 (1971).

[10] S. Rep. No. 92-1236 at 144 (1971).

[11] H.R. Conf. Rep. No. 92-1465 (1972).

Finally, the debate in Congress on final passage of the Act confirmed the conference report's intent that the law be given broad application. For example, Congressman John Dingell Jr. explained the definition in his statement to the House on the conference committee bill:

> The conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographical sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws.[12]

After reviewing the broad extent of the Commerce Clause authority, Representative Dingell went on to state:

> Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill. Indeed, the conference report states on page 144: The conferees fully intend that the term navigable waters be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes.[13]

Thus, Congress quite intentionally expanded the Act's jurisdictional scope in 1972 because of the new and ambitious water pollution reduction goals of the Act. For this reason, Congress chose not to retain the traditional definition of the jurisdictional term "navigable waters" from the Rivers and Harbors Act or limit its jurisdictional reach as in earlier versions of the FWCPA.[14] Instead, Congress deleted the word "navigable" from the "navigable waters" definition of the 1972 Act, thereby asserting federal jurisdiction over all "waters of the United States" as necessary to achieve its stated objective to rid the Nation's waters of pollution.

Historically, the law has been construed by the courts to apply to a wide variety of waters. Long before *Rapanos* and *SWANCC*, the Supreme Court recognized that the Act was designed to establish "an all-encompassing program of water pollution regulation," and "applies to all point sources and virtually all bodies of water." *Intl. Paper Co. v. Ouellette*, 479 U.S. 481, 492 (1987) (emphasis added; internal quotations omitted); *see also U.S. v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979) ("It seems clear Congress intended to regulate discharges made into every creek, stream, river or body of water that in any way may affect interstate commerce."); *NRDC v. Callaway*, 392 F.Supp. 685, 686 (D.D.C. 1975) ("Congress by defining the term 'navigable waters' . . . to mean 'the waters of the United States, including the territorial seas,' asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution.").

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[12] 118 Cong. Rec. 33 at 756-57 (Oct. 4, 1972) (emphasis added).

[13] *See* House consideration of the report of the Conference Committee, Oct. 4, 1972, compiled in Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1, 93rd Cong. (1973), at 250-251 (emphasis added).

[14] Again, as noted above, the definition of "navigable water" in earlier version of the FWCPA had made express reference to "navigability." 211 80 Stat. 1253.

Many of the protections built into the Clean Water Act – including the requirement that point sources discharging pollutants into waters must have a permit – are triggered only when the body of water in question is a "water of the United States." *See* 33 U.S.C. § 1311(a) (generally prohibiting the "discharge of any pollutant" without compliance with other requirements of the Act); *id.* § 1362(12) (defining "discharge of a pollutant" to mean "any addition of any pollutant to navigable waters from any point source"); *id.* § 1362(7) (defining "navigable waters" to mean "the waters of the United States"). Likewise, the Act's core permit program – the § 402 National Pollutant Discharge Elimination System program[15] – applies to "navigable waters," *i.e.*, to "the waters of the United States." § 502(7). Accordingly, the evolution of § 402 offers highly relevant contextual evidence concerning the proper interpretation of the § 502(7) definition.

The § 402 NPDES program was designed to supersede the preexisting permit program under the 1899 Refuse Act. Section 402 provides that permits previously issued under the Refuse Act would thenceforth constitute NPDES permits, and that no further Refuse Act permits would be issued. 33 U.S.C. §§ 1342(a)(4) & (5). Tellingly, the 1899 Refuse Act does not merely govern discharge into traditionally navigable waters. To the contrary, it encompasses discharge "into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water." 33 U.S.C. § 407 (emphasis added).

Thus, to conclude that non-navigable tributaries of traditionally navigable waters are exempt, one would have to believe that the 1972 Congress cut back the geographic scope of the predecessor statute.[16] The notion that Congress intended any such cutback is untenable. To the contrary, faced with rivers literally catching fire due to pollution, *see U.S. v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1326 (6th Cir. 1974), the 1972 Congress concluded that "the previous legislation was 'inadequate in every vital aspect'" – and responded by enacting a "comprehensive" statute whose intent "was clearly to establish an all-encompassing program of water pollution regulation." *Milwaukee v. Illinois*, 451 U.S. 304, 318 & 319 n. 10 (1981) (emphasis added). In direct contradiction to this approach, exclusion of certain non-navigable tributaries (as suggested by some polluting industries) would dramatically shrink federal water pollution regulation back to a narrow geographic scope not seen since the McKinley Administration in the 19th century.

The 1977 Amendments to the Act further confirm the inclusive nature of the law's scope. During the deliberations on those amendments, attempts were made to narrow the waters covered by the Clean Water Act (and by the Refuse Act). Under the proposed narrowing language, the permitting safeguards of those statutes would have encompassed only traditionally navigable waters, together with wetlands that were both "contiguous or adjacent" to such waters and "periodically inundated." *See, e.g.*, Legislative History of the Clean Water Act of 1977 (October 1978), at 901. Numerous Senators objected to the proposal as a significant weakening of the law and stressed that excising certain waters would undermine the basic structure of the Act. For example, Senator Baker emphasized that

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[15] Section 402 authorizes issuance of permits for "the discharge of any pollutant," 33 U.S.C. § 1342(a)(1), and § 502 defines "discharge of a pollutant" as the addition of a pollutant "to navigable waters." *Id.* § 1362(12).

[16] Indeed, the cutback would be dramatic. *See* Letter of Jan 9, 2006 from Benjamin Grumbles, Assistant Administrator of EPA, *attached as appendix to* Brief *Amicus Curiae* of Assn. of State Wetlands Managers in *Rapanos*, 2006 WL 139206 (Jan. 13, 2006) (estimating that over half of all U.S. streams are not traditionally navigable); Lance D. Wood, Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands, 34 Envtl. L. Rptr. 10187, 10193 n.32 (2004) (in the Missouri River watershed, there are by conservative estimate 559,669 miles of traditional navigable waters plus tributaries, of which traditional navigable waters represent only 3,151 miles—less than 1%). Even if only a fraction of these tributaries were to be left out of the scope of the Clean Water Act's protections – such as those lacking "relatively permanent flow" or a demonstrable "significant nexus" to traditional navigable waters – the water pollution impacts would be significant.

> [c]omprehensive jurisdiction is necessary not only to protect the natural environment but also to avoid creating unfair competition. Unless Federal jurisdiction is uniformly implemented for all waters, dischargers located on nonnavigable tributaries upstream from the larger rivers and estuaries would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors.

Id. at 920. Although the proposed narrowing language was included in the House bill, the Senate – and ultimately Congress as a whole – rejected it. *See U.S. v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 136-37 (1985) (discussing the 1977 debate and Congress' ultimate abandonment of any effort to narrow the definition of "waters").

A Broad Scope of Protection is Needed Because it Affects Numerous Clean Water Act Programs

As noted above, the Clean Water Act has one definition of "waters of the United States" that is the same for all of the Act's provisions. *See, e.g.,* Brief of the U.S. Gov't in *Rapanos* at 21 ("the term 'waters of the United States' "defines the scope of regulatory jurisdiction to be exercised under other provisions of the CWA."). In particular, because CWA section 301(a) broadly prohibits the discharge of any "pollutant" to such waters from any "point source" without a permit, *see* 33 U.S.C. §§ 1311(a), 1362(12), the "waters of the United States" are the same, irrespective of whether the pollution is regulated by a permit under the National Pollutant Discharge Elimination (NPDES) program of CWA § 402 or the "dredge-and-fill" program of § 404. *See id.* § 1342(a) (providing for NPDES permits for "discharge of any pollutant"), § 1362(12) ("[t]he term 'discharge of a pollutant' . . . means . . . any addition of any pollutant to navigable waters from any point source"), § 1344(a) (providing for permits for "discharge of dredged or fill material into the navigable waters"); *see also* Oral Argument Transcript, *Rapanos v. U.S.*, at 57 (Feb. 21, 2006) (statement of Solicitor General Clement) ("whatever this Court decides for purposes of the 404 jurisdiction, it's necessarily deciding for purposes of the 402 jurisdiction of the EPA.").[17]

In their continuing quest for loopholes that would allow them to spill oil into our Nation's precious waters, American Petroleum Institute (API) and Marathon Oil Company have mounted a facial attack on a 2002 Environmental Protection Agency regulation defining which waters are protected by Clean Water Act § 311 – the Act's principal safeguard against oil spills. The statutory term "navigable waters" and its definition as "waters of the United States" govern the scope of this program as well.[18]

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[17] At least some of the opponents of the Clean Water Restoration Act even concede that the definition of "waters of the United States" applies to Clean Water Act programs beyond the § 404 dredge and fill permit program. See Waters Advocacy Coalition, *Reasons To Oppose the "Clean Water Restoration Act of 2007," H.R. 2421* (noting that the definition of "waters of the U.S." affects waters subject to water quality standards, effluent limitation guidelines (which are relevant to the Act's § 402 NPDES permit program) and, the setting of Total Maximum Daily Loads (TMDLs)); *see also* Brief of *Amici Curiae* Croplife America et al., *Rapanos v. U.S.*, at 4 (Dec. 5, 2005).

The Supreme Court's Decision in SWANCC

Despite the clear legislative history and purpose of the Clean Water Act, previous Supreme Court precedent in *Riverside Bayview* and *Oulette,* and numerous lower court cases broadly interpreting the jurisdictional scope of the law, in 2001, the Supreme Court – in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001) ("*SWANCC*") – held that non-navigable, intrastate, "isolated" waters could not be classified as "waters of the United States" solely based on the government's so-called "Migratory Bird Rule," which protected aquatic habitat used by migrating birds.

The holding itself was narrow, but the opinion contained language that encouraged numerous additional attacks on legal protection for waters that are not traditionally navigable. In the wake of *SWANCC*, the courts generally did not read the decision broadly, though it still did lead to a cut back on legal protections. *See, e.g., U.S. v. Rapanos*, 376 F.3d 629, 638 (6th Cir. 2004) ("the majority of courts have interpreted *SWANCC* narrowly to hold that while the CWA does not reach isolated waters having no connection with navigable waters, it does reach inland waters that share a hydrological connection with navigable waters").

Advanced Notice of Proposed Rulemaking and 2003 Guidance

Following *SWANCC*, on January 15, 2003, the EPA and Army Corps of Engineers published an Advance Notice of Proposed Rulemaking (ANPRM) raising questions about the jurisdiction of the Clean Water Act. Simultaneously, they released a guidance memo to their field staff regarding Clean Water Act jurisdiction over certain so-called "isolated," non-navigable, intrastate waters (the term "isolated" waters appears nowhere in the Clean Water Act itself, but was a term used by the Court in *SWANCC*). The agencies claimed these actions were necessary because of the *SWANCC* case, but both the guidance memo and the ANPRM went far beyond the Court's holding.

The guidance took effect right away and had an immediate impact on many of the Nation's wetlands, creeks, ponds, and streams. It told the Corps and EPA staff to stop asserting jurisdiction over so-called "isolated" waters without first obtaining permission from headquarters. 68 Fed. Reg. 1991, 1997-98 (Jan. 15, 2003) ("field staff should seek formal project-specific HQ approval prior to asserting jurisdiction over waters based on other factors listed in 33 CFR 328.3(a)(3)(i)-(iii)."). No similar instructions were issued to get permission before allowing unregulated pollution or destruction of these waters by determining that they were not subject to Clean Water Act jurisdiction. The EPA itself estimated that as many as 20 million acres of wetlands – 20 percent of the remaining wetlands in the continental U.S. – were "isolated," meaning they were placed at risk of losing federal CWA protections under the 2003 policy. *See* Eric Pianin, *Administration Establishes New Wetlands Guidelines; 20 Million Acres Could Lose Protected Status, Groups Say*, Wash. Post, Jan. 11, 2003, at A5 ("The new regulation would shift responsibility from the federal government to the states for protecting as much as 20 percent of the 100 million acres of wetlands in the Lower 48 states, according to official estimates.").

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[18] Ironically, in their briefs in this case, API cites to Congressman Dingell's famous floor statement – explaining how the conferees gave broad meaning to the term "navigable waters" – to try to claim that the 1972 legislation meant the exact opposite, that is, that Congress was primarily concerned with navigability. Congressman Dingell submitted an amicus brief in that case to dispel that argument.

The ANPRM announced the administration's intention to consider even broader changes to Clean Water Act coverage through rulemaking. Specifically, in the Federal Register notice, the agencies questioned whether there is *any* basis for asserting Clean Water Act jurisdiction over any so-called "isolated" water, even those used in or affecting interstate commerce.

Fortunately, overwhelming opposition to the proposed rulemaking from Congress (including 218 members of the House); state water pollution control, fish and wildlife, and natural resources agencies; hunting and angling groups; environmental organizations;[19] and the public (over 130,000 individual citizens submitted comments, overwhelmingly in the negative) caused then-EPA Administrator Michael Leavitt to announce that the administration was dropping the rulemaking idea.[20]

However, the EPA did not withdraw the guidance, but left it in place (including its biased, one-way policy requiring staff to call for permission to protect waters but not for permission to authorize their destruction or degradation). Using data provided by the agencies, it is estimated that the Corps has been making well over 1000 *SWANCC*-related "no jurisdiction" determinations a year, yet in the 4 years since the 2003 policy was adopted, fewer than 20 cases were elevated to EPA or Corps headquarters by field staff seeking to assert jurisdiction over disputed waters.[21]

In an August 2004 report based upon Corps of Engineers' records, Earthjustice, the National Wildlife Federation, Natural Resources Defense Council, and Sierra Club found numerous examples of the Corps using the *SWANCC* decision and the 2003 guidance to decline jurisdiction over waters that clearly were covered by the Clean Water Act. The case studies in the report indicated that Corps districts around the country refused to assert jurisdiction over obviously significant waters including an 86-acre lake, a 150-mile-long river, a 4000-acre tract of wetlands, and a 70-mile-long canal – leaving these waters and many others across the nation vulnerable to pollution and destruction. *See* Earthjustice, NWF, NRDC, and Sierra Club, *Reckless Abandon: How the Bush Administration is Exposing America's Waters to Harm,* Aug. 2004 (available at http://www.earthjustice.org/library/reports/CWA_Jurisdiction_8-12-04.pdf).

On May 18, 2006, the U.S. House of Representatives voted 222-198 to approve an amendment that would block the use of federal funds to implement the illegal 2003 policy. However, the

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[19] The comments submitted by national environmental organizations, many of which join this testimony to the Committee today, are attached. We are also submitting a data disk containing many of the materials cited in these groups' comments. We respectfully request that this material be included in the record. See also http://www.earthjustice.org/library/policy_factsheets/comments-from-earthjustice.pdf.

[20] *See Rapanos,* Stevens, J., Dissenting Opinion, n.4 (describing agencies' effort to revise regulations and noting that "almost all of the 43 States to submit comments opposed any significant narrowing of the Corps' jurisdiction – as did roughly 99% of the 133,000 other comment submitters").

[21] See attached document, "No Jurisdiction Determinations Resulting from SWANCC Jan. – Mar. 2004."

Senate did not pass an EPA-Interior appropriations bill in 2006, so the House amendment did not become law, and the EPA and Corps have continued to follow this policy, despite the overwhelming, bipartisan opposition to it – and despite the harm that it has already caused.

The Rapanos Decision and Its Three Major Opinions

Although the claims of those opposed to Clean Water Act protections were largely rejected by the lower courts in the wake of *SWANCC*, in October 2005 they were able to convince the Supreme Court to take up two other cases – *United States v Rapanos* and *Carabell v. U.S. Army Corps of Engineers* – that together questioned the extent to which the law protects non-navigable tributaries and their adjacent wetlands.

In the *Rapanos* and *Carabell* cases, the Bush administration argued that the Clean Water Act and its implementing regulations properly encompass and protect both tributaries of "traditionally navigable" waters and the wetlands adjacent to these tributary streams and rivers. This position was supported by briefs filed by more than 30 State attorneys general and nine members of Congress who helped pass the Clean Water Act in 1972, its amendments in 1977, or both. Also filing briefs in favor of the government's position were: four former EPA administrators who served under Republican and Democratic administrations; a coalition of hunting and angling groups and businesses; state water pollution control officials, wetland managers, fish and wildlife agencies, and floodplain managers; New York City; numerous western resources councils; Macomb County (MI); and many environmental, public health and conservation groups.

The *Rapanos* petitioners and some supporting organizations argued that the Clean Water Act does not protect non-navigable tributaries and only covers those wetlands directly adjacent to traditionally navigable waters.[22] In its decision (which addressed the two consolidated cases) the Supreme Court had no majority opinion but split 4-1-4 in its analysis of the Clean Water Act and the extent to which the law covers tributaries and wetlands. *Rapanos v. U.S.*, 126 S.Ct. 2208 (2006). Consequently, the Court did not invalidate the agency's existing rules, but the various opinions suggested three different tests for determining whether streams and other tributaries and wetlands adjacent to those waters remain under the scope of the Clean Water Act.

The four-justice plurality, in an opinion written by Justice Scalia, would significantly limit the law's scope. Focusing on a 1954 dictionary definition of "waters" more than the language, purpose, or history of the Clean Water Act (a law he characterized as "tedious"), Justice Scalia, joined by Chief Justice Roberts and Justices Thomas and Alito, concluded that:

> [T]he phrase 'the waters of the United States' includes only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic features' that are described in ordinary parlance as 'streams[,] … oceans, rivers, [and] lakes.' . . . The phrase does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall.

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[22] The petitioners in the *Carabell* advanced a more limited argument, claiming that it was impermissible for the Corps to regulate a wetland as "adjacent" to a protected water body – and therefore subject to the CWA – if it lacked a hydrological connection with the water body. Brief of Petitioners, *Carabell v. U.S. Army Corps of Eng'rs*, at 12-13 (Dec. 2, 2005).

Id. at 2225 (plurality opinion). The opinion also would require wetlands to have a "continuous surface connection" to such waters to be protected. *Id.* at 2226. The opinion even seems to indicate that the plurality might believe that water bodies must be interstate (or connected to interstate waters) in order to be "waters of the United States." *Id.* at 2220 n.3 (stating that the phrase "of the United States" traditionally "excludes intrastate waters, whether navigable or not" and suggesting that the CWA's use of the phrase "retains some of its traditional meaning").

Justice Kennedy would require the agencies to show a physical, biological, or chemical linkage – a "significant nexus" – between a water body and an actually navigable one in order for it to be protected. *Id.* at 2248 (Kennedy, J., concurring). For tributaries, Justice Kennedy says that, applied consistently, existing rules "may well provide a reasonable measure of whether specific minor tributaries bear a significant nexus with other regulated waters to constitute 'navigable waters' under the Act." *Id.* at 2249. For wetlands adjacent to non-navigable tributaries, Justice Kennedy suggested that a "significant nexus" could be shown in different ways, depending on the kind of water to which the wetland is adjacent. *Id.* ("When the Corps seeks to regulate wetlands adjacent to navigable-in-fact waters, it may rely on adjacency to establish its jurisdiction. Absent more specific regulations, however, the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries.").

While he concurred that the cases should be remanded, Justice Kennedy completely rejected Justice Scalia's reasoning. Indeed, he stated that Justice Scalia's plurality opinion "is inconsistent with the Act's text, structure, and purpose." *Id.* at 2246.

In dissent, Justice Stevens, joined by Justices Souter, Ginsburg and Breyer, said that the existing agency regulations reflect a reasonable interpretation of the statutory phrase "waters of the United States," especially in light of the Court's unanimous 1985 decision in *US v. Riverside Bayview Homes*, which upheld the application of these very same rules. *Id.* at 2255. While rejecting the rationale of both of the other opinions, these four justices stated that, since they would protect all of the waters that Justice Scalia's test would protect and all of the ones Justice Kennedy's test would protect, the agencies should continue to protect streams and wetlands if they qualify under either test. *Id.* at 2265 & n. 14.

On the whole, then, the Supreme Court's decision raises several significant issues and new concepts of Clean Water Act jurisdiction. We hope the Committee – and Congress as a whole – will take these varying interpretations into consideration when determining how to respond to the Supreme Court's decision. *See id.* at 2236 (Roberts, C.J., concurring) ("no opinion commands a majority of the Court on precisely how to read Congress' limits on the reach of the Clean Water Act."). Although Justice Kennedy's test may well permit the law to continue to reach many of the same waters it historically had been interpreted to protect, the practical effect of his approach is to make numerous jurisdictional questions subject to a vague case-specific analysis. *See id.* at 2250 (Kennedy, J., concurring) ("[T]he end result in these cases and many others to be considered by the Corps may be the same as that suggested by the dissent, namely, that the Corps' assertion of jurisdiction is valid. Given, however, that neither the agency nor the reviewing courts properly considered the [significant nexus] issue, a remand is appropriate, in my view, for application of the controlling legal standard.").

The Aftermath of Rapanos

What water bodies remain protected by the federal Clean Water Act after *Rapanos*? It depends on whom you ask.

There is no five-Justice majority rationale in *Rapanos* for restricting jurisdiction over wetlands adjacent to non-navigable tributaries;[23] indeed no specific water was determined to be non-jurisdictional in *Rapanos*. Likewise, as noted above, the Court's holding in *SWANCC* was ultimately a narrow one that permits the agencies to protect geographically "isolated" water bodies based upon factors other than the "Migratory Bird Rule." Consistent with these principles, the agencies charged with implementing the law could continue to protect the Nation's water bodies identified in their regulations, and provide meaningful guidance for their field staff and the public, showing how to develop the facts that will help support jurisdiction (i.e., relationship to interstate commerce for "isolated" waters and "significant nexus" or "continuous surface connection" for wetlands adjacent to non-navigable tributaries).

However, there are strong indications from the past year of living with *Rapanos* that not all will follow this more protective view of the decision. Rather, as discussed below, already there have been a number of interpretations of the *Rapanos* decision and its conflicting opinions, with the net result being that confusion still reigns.

Many Cases, Many Approaches

The first court to deal with *Rapanos* following the Supreme Court's decision is an important example of the kinds of problems the 4-1-4 split opinions could unleash. In *United States v. Chevron Pipeline Company*, 437 F.Supp.2d 605 (N.D. Tex., 2006), the government sought civil fines under the Clean Water Act against Chevron for spilling approximately 126,000 gallons of crude oil from a corroded pipeline. The oil spill flowed into an unnamed tributary and a water body known as Ennis Creek, an intermittent stream near Snyder, Texas. Chevron contended that there was no flowing water in the Creek or its tributary during August, September, and October of 2000 when the spill (and the company's initial cleanup actions) occurred. The Bush administration's Justice Department argued that the fact that there was not flow in the stream at the time of the spill did not mean that the stream was not protected by the Clean Water Act.[24] The government contended that, during those times of the year that there was flow in the Creek, there was an unbroken connection from the stream to Rough Creek and then to the Double Mountain Fork of the Brazos River.[25]

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[23] As discussed further below, EPA and the Corps, among others, have interpreted the *Rapanos* opinion to place limitations on non-navigable tributaries themselves, as opposed to limiting the decision to the wetlands adjacent to non-navigable tributaries. We believe this is in error. Justice Kennedy indicated that the Corps could properly assert categorical jurisdiction over tributaries by applying its regulations consistently. 126 S. Ct. at 2249 (noting that the Corps asserted jurisdiction over tributaries having an "ordinary high water mark" under § 328.3(e), Justice Kennedy concluded: "Assuming [this standard] is subject to reasonably consistent application, it may well provide a reasonable measure of whether specific minor tributaries bear a sufficient nexus with other regulated waters to constitute 'navigable waters' under the Act.") (citation omitted). Indeed, both *Rapanos* and *SWANCC* involved water bodies in categories other than tributaries ("other waters" and "[w]etlands adjacent to waters," respectively).

[24] Brief of the U.S. at 2-3.

In its decision, the court noted that there was no majority opinion in *Rapanos*, and in trying to make sense of the Supreme Court's decision, found that Justice Kennedy's "significant nexus" test was not sufficiently clear to follow as a guide to the lower courts. *See* 437 F.Supp.2d at 613 ("[b]ecause Justice Kennedy failed to elaborate on the 'significant nexus' required, this Court will look to the prior reasoning in this circuit."). The court therefore chose to rely on previous circuit precedents and cited favorably the Scalia plurality opinion to support its conclusion that the U.S. could not impose fines on Chevron for spilling what amounted to approximately 3,000 barrels of crude oil into Ennis Creek and its tributary because neither qualified as a "water of the United States." *Id.* at 614 (noting similarity of receiving water to a kind of water body discussed in plurality opinion and saying "the United States failed to direct the Court to evidence showing whether any oil from the spill actually reached 'the navigable waters of the United States' – as that term is defined in [prior circuit precedent] or in the Supreme Court's plurality opinion in *Rapanos*.").

Litigants in other lower court cases are already favorably citing the Scalia plurality and arguing that it should be the governing test. For example, *see* Brief *Amicus Curiae* of Pacific Legal Foundation, National Federation of Independent Business Legal Foundation, and Building Industry Association of Washington in Support of Plaintiffs at 9 -13, *American Petroleum Inst. v. Johnson*, No. 1:02CV02247 (D.D.C. Mar. 2, 2007). This makes very little sense; five Justices explicitly rejected the plurality opinion, and Justice Kennedy expressly opined that the plurality approach "makes little practical sense" and "is inconsistent with the Act's text, structure, and purpose." 126 S.Ct. at 2242 & 2246. Hopefully, other lower courts will not adopt the plurality opinion; however, there is no guarantee that they will not.

Some other lower courts are following different paths. They have determined that Justice Kennedy's "significant nexus" test is now the controlling legal opinion, despite the fact that he alone embraced the "significant nexus" approach as the Clean Water Act test for jurisdiction. *See, e.g., Northern California River Watch v. Healdsburg*, 457 F.3d 1023, 1029 (9th Cir. 2006) ("Justice Kennedy ... provides the controlling rule of law"); *United States v. Gerke Excavating, Inc.*, 464 F.3d 723, 724 (7th Cir. 2006) ("in *Rapanos*, [the narrowest ground] is Justice Kennedy's ground"); *Environmental Protection Information Ctr. v. Pacific Lumber Co.*, 469 F. Supp.2d 803 (N.D. Ca. 2007) (following *Healdsburg*); *United States v. Pozsgai*, No. 88-6545 at 4 (E.D. Pa. 2007) ("[f]or purposes of this litigation, I will apply Justice Kennedy's test").

Still other courts have determined that if either the Scalia "relatively permanent flow" or the Kennedy "significant nexus" test is met, the disputed waterbody will remain under Clean Water Act jurisdiction. See, e.g. *United States v. Johnson*, 467 F.3d 56, 60 (1st Cir. 2006) (jurisdiction appropriate under "either the plurality's or Justice Kennedy's standard"); *Simsbury-Avon Preservation Soc'y, LLC v. Metacon Gun Club, Inc.*, 472 F.Supp.2d 219, 226 (D. Conn. 2007) (evaluating citizen suit under both plurality and Justice Kennedy standards); *United States v. Evans*, NO. 3:50-cr-159(S3)-J-32MMH, 2006 WL 2221679, 19 (M.D. Fla., 2006) ("this Court will consider the jurisdictional requirement for 'waters of the United States' to be met if the affidavits satisfy either the plurality's test . . . or the general parameters of Justice Kennedy's concurrence.").

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[25] Id. at 11.

The confusion shown in this early case law trying to divine the meaning and significance of the *Rapanos* 4-1-4 split is strong evidence in itself of the uncertainties generated by the Supreme Court's fractured decision. Even after the *SWANCC* decision, the lower courts were fairly uniform in their interpretation of the precedent set by that case. See *United States v. Rapanos*, 376 F.3d 629, 638 (6th Cir. 2004) ("the majority of courts have interpreted *SWANCC* narrowly to hold that while the CWA does not reach isolated waters having no connection with navigable waters, it does reach inland waters that share a hydrological connection with navigable waters."). But now, in the post-*Rapanos* world, it already seems clear that the lower courts are likely to diverge in their opinions on what waterbodies the Clean Water Act should now be understood to protect – or not protect.

Rulemaking Petition by Pacific Legal Foundation

In late September 2006, the Pacific Legal Foundation (PLF) announced that it had petitioned the EPA and Corps to dramatically rewrite the regulatory definition of "waters of the United States" so that only those water bodies that could satisfy Justice Scalia's plurality opinion would be protected. The petition claimed:

> The Scalia opinion provides a common denominator such that when its jurisdictional test is met, it would garner a unanimous Supreme Court vote. Additionally, it is the only definition of "waters of the United States" that is readily determinable by both the public and regulatory officials. It also hews more closely to the plain statutory language and the government's original interpretation of the Act in 1974 when it concluded that "waters of the United States" meant navigable-in-fact waters. More importantly, the Scalia approach is the most likely to produce consistent and predictable enforcement standards that satisfy constitutional safeguards for fairness and justice.

Pacific Legal Foundation, Petition for Rulemaking Under Administrative Procedure Act to Amend regulatory definition of "waters of the United States" as found in 33 C.F.R. § 328.3, at 2 (Sept. 25, 2006) (citation omitted). In other words, PLF argues that, because the plurality's test would clearly regulate many fewer waters, and because the Supreme Court could at least agree on protecting those (even though a majority of Justices would hold that the Act applies much more broadly), the agencies should adopt the most restrictive (and least protective) standard articulated in the case.

PLF attorney Reed Hopper, who argued the *Rapanos* case against the Bush administration, said of the rulemaking petition that "[f]or 30 years, the public has been subject to uncertain and inconsistent jurisdictional standards that have been the hallmark of Clean Water Act enforcement. It is time for action and time for a change."[26]

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[26] http://enewsusa.blogspot.com/2006/09/plf-petition-to-define-waters-of.html

The petition request was a retreat from the position PLF put forward on behalf of the petitioner in *Rapanos*, for not even the plurality opinion authored by Justice Scalia – itself a radical departure from years of Clean Water Act implementation – adopted PLF's extreme position on the law. Rather, as noted above, the plurality opined that all bodies of water that are "relatively permanent, standing or continuously flowing" and wetlands having a "continuous surface connection" to such waters are covered by the law.[27]

PLF's rulemaking petition, which admittedly is part of a concerted campaign to use litigation to undo the enforcement of the Clean Water Act,[28] is just a further attempt to use the uncertainty created by *Rapanos*, as well as *SWANCC*, to leave the majority of the Nation's streams, rivers, and wetlands outside the long-established and accepted scope of the Clean Water Act. The fact that these decisions are being used to make arguments so obviously inconsistent with the intent of Congress underscores the need for Congress to reaffirm its original intent today.

New Guidance from EPA and the Corps Makes Things Worse

Just last month, the EPA and Corps issued another policy "guidance" – this one interpreting the *Rapanos* decision – that threatens to accelerate the speed at which the Nation's water quality programs are being thrown into reverse. *See* U.S. EPA & U.S. Army Corps of Eng'rs, Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in Rapanos v. United States & Carabell v. United States (June 5, 2007).

This new, complicated policy will leave many more waters without the clear, categorical Clean Water Act protections from pollution and destruction that have safeguarded them for the last three decades. Instead of categorically protecting many streams and wetlands, the new policy will leave continued Clean Water Act coverage of these waters to an unworkable, speculative, case-by-case analysis by the EPA and Corps.

Briefly stated, the "guidance" says that field staff generally should exercise jurisdiction over water bodies that either the *Rapanos* plurality or Justice Kennedy would cover, as the dissent in *Rapanos* suggested. *Id.* at 3. But that summary belies the complexity and vagueness that pervade the documents released last month, and close examination of the "guidance" reveals that when the agencies made interpretive decisions about how to apply the *Rapanos* tests, they frequently erred on the side of being less protective of clean water. Specifically, the policy:

- Leaves in place the 2003 EPA/Corps policy that significantly undermined protections for water bodies that are geographically "isolated" and other intrastate waters.[29] *Id.* at 4 n. 18. This means that the various new tests for Clean Water Act jurisdiction under the *Rapanos* decision – the "relatively permanently flowing" test and the "significant nexus test" – would be piled on top of the "isolated waters" test from the 2003 policy to essentially make a tangled, snarled mess out of the law.[30]

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[27] *Rapanos* at 2225-26 (plurality opinion).

[28] http://enewsusa.blogspot.com/2006/09/plf-petition-to-define-waters-of.html ("PLF is actively pursuing litigation all over the United States").

[29] As noted above, that 2003 policy was strongly repudiated by the U.S. House of Representatives in a bipartisan vote last year.

- Virtually eviscerates the ability – when implementing the "significant nexus" standard – to protect waters by demonstrating the collective importance of waters "similarly situated" over a large, regional scale.[31] Thus, the agencies can only consider each headwater stream segment and its associated wetlands in isolation – ignoring the very significant combined impact of all headwater streams and associated wetlands in the "region" on the rivers or lakes downstream. *Id.* at 9. This will make it vastly more difficult to protect many small streams with intermittent or ephemeral flow and their associated wetlands under the Clean Water Act.

- Imposes new jurisdictional hurdles to the protection of tributary streams, despite the fact that the cases at issue in *Rapanos* involved the application of the rules governing adjacent wetlands, not the streams themselves. *Id.* at 1.

- Creates extreme uncertainty about how to implement the "significant nexus" standard in practice. It does so by laying out a series of factors that should be considered, without providing any clear roadmap for how these factors are to be evaluated. For instance, although it says that "[p]rincipal considerations when evaluating significant nexus include the volume, duration, and frequency of the flow of water in the tributary and the proximity of the tributary to a traditional navigable water," it also instructs field personnel to look at a range of ecologic factors, and does not say how staff should balance these considerations if they point in different directions.[32] *Id.* at 9-10.

- Says that jurisdictional determinations for tributaries should focus on the characteristics (flow, etc.) of a stream at its "farthest downstream limit," apparently without regard to whether other portions of the stream might have conditions more supportive of jurisdiction under the various announced tests. *Id.* at 5 n. 21.

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[30] On a related point, even though Justice Kennedy explained that the absence of a hydrological connection between a wetland and a covered water body may provide a "significant nexus" between the two, *see* 126 S.Ct. at 2251 (Kennedy, J., concurring) ("Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system"), the new policy suggests that staff cannot demonstrate jurisdiction over so-called "isolated" waters by demonstrating a "significant nexus."

[31] In the course of explaining why it is reasonable to afford Clean Water Act protection to wetlands, for instance, Justice Kennedy gave an example of how small waters in the upper Mississippi watershed contribute nutrient pollution that creates an enormous "dead zone" in the Gulf of Mexico. 126 S.Ct. at 2246-47. In contrast, the "guidance" only allows agencies to consider the collective impacts for wetlands next to just one tributary, defined as one particular order of a single stream.

[32] The Corps also issued an "Instructional Guidebook" to accompany the policy, and the guidebook contains a number of photos to illustrate the kinds of waters that the "guidance" might affect. Interestingly, although the guidebook has 11 photos of non-relatively permanent waters that flow into traditionally navigable waters, and thus would be jurisdictional under the "guidance" only if a "significant nexus" could be shown, the Corps does not indicate which, if any, of these water bodies is jurisdictional. Indeed, as best we can determine, the agencies did not include – anywhere in the myriad "guidance" materials released in June – any single example of a water body that the agency believes is connected by a "significant nexus" to a traditionally navigable water.

- Announces, and then partially retracts, a presumption that certain kinds of geographic features are not "waters of the United States," without providing useful guidance on how to tell the difference between features that are protected and those that are not. *Compare id.* at 11 ("Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow) are generally not waters of the United States because they are not tributaries or they do not have a significant nexus to downstream traditional navigable waters.") *with id.* ("Certain ephemeral waters in the arid west are distinguishable from the geographic features described above where such ephemeral waters are tributaries and they have a significant nexus to downstream traditional navigable waters.").

The confused "case-by-case" analysis embodied in the new policy no longer guarantees protections for many streams and rivers that do not flow all year long – streams and rivers that have long been protected by the Clean Water Act. The required case-by-case review will effectively eliminate protections for some streams and rivers, even though the Supreme Court did not strike down existing agency regulations that protect these tributaries.[33]

If past is prologue, these jurisdictional challenges will likely be resolved haphazardly and in many cases incoherently in the EPA Regions, the Corps' 38 districts, and then in the courts, further muddying the legal waters regarding the true scope of "waters of the United States" intended by Congress. *See* Government Accountability Office, *Waters and Wetlands: Corps of Engineers Needs to Better Support its Decisions for Not Asserting Jurisdiction,* GAO-05-870, Sept. 2005; *see also* the *Reckless Abandon* report, discussed above.

Congress Must Act to Reaffirm and Clarify the Law to End the Current Confusion

As the foregoing discussion demonstrates, the law is presently in a state of significant disarray. Calls for a solution that brings legal clarity abound. We believe that Congress is best suited to provide that clarity.

Congress needs to reaffirm its original intent to control pollutants at the source and to reassert protection for the Nation's streams, rivers, and wetlands by enacting the Clean Water Restoration Act of 2007. In fact, only Congress (not the regulatory agencies or the courts) can guarantee the continued protection for all "waters of the United States" that have been covered by the Clean Water Act for the last 35 years.

When Supreme Court justices consult outdated dictionaries to divine the meaning of legislators whose express statements they ignore, it is time for Congress to step in and reaffirm what Congress means. Because Congress has clearly and correctly recognized since 1972 that controlling pollution at the source required asserting broad jurisdiction over the Nation's waters, we believe that re-establishing that scope through legislation today is vital.

Congress can reaffirm the agencies' long-standing definition and interpretation of "waters of the United States" by enacting the Clean Water Restoration Act, H.R. 2421. This bill adopts a statutory definition of "waters of the United States" that is based on the regulatory definition that has been used by EPA and the Corps for nearly 30 years. Congress must act for at least three reasons.

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[33] For the above and other reasons, we do not believe that the recent EPA/Corps guidance is legally valid or binding.

First, as the history of this issue reveals, various industries and other entities that wish to be free of Clean Water Act limitations on polluting and even destroying the Nation's waters will continue to work to unravel the Clean Water Act, arguing to lower courts and the agencies themselves that certain rivers, wetlands, and streams are no longer protected by the Act because of the *Rapanos* decision.

Second, the new "guidance" fails to adequately protect all the waters the EPA and the Corps could have protected under *Rapanos*, clearly making it more even more difficult than it needed to be to continue to invoke the provisions of the Clean Water Act. A similar thing happened after the *SWANCC* decision; the agencies issued "guidance" that raised more questions about the Court's opinion than it answered, causing confusion in the field. That policy made it harder to assert jurisdiction over waters than to ignore jurisdiction, and thus allowed the pollution or destruction of formerly protected waters.

Third and most importantly, only Congress can ensure that the Supreme Court's decision does not lead to future judicial interpretations of the law with devastating results for water protection. *See e.g.*, 126 S.Ct. at 2247 (Kennedy, J., concurring) ("[B]ecause the plurality presents its interpretation of the Act as the only permissible reading of the plain text ... the Corps would lack discretion, under the plurality's theory, to adopt contrary regulations .... New rulemaking could have averted the disagreement here only if the Corps had anticipated the unprecedented reading of the Act that the plurality advances."). In other words, not only is it the case that the EPA's and Corps' newly-issued guidance fails to protect all waters that the agencies could have continued to protect, even under the "significant nexus" test, even new agency regulations cannot provide insurance against future court decisions questioning whether Congress intended these or other waters to be protected. Only a legislative fix can do that.

The Clean Water Restoration Act Is the Right Fix

The Clean Water Authority Restoration Act of 2007, H.R. 2421, would restore the traditional scope of protection intended by Congress. Americans need these safeguards to achieve the goal of restoring and maintaining the chemical, physical and biological integrity of the Nation's waters.

Specifically, the legislation would:

1) Adopt a statutory definition of "waters of the United States" based on the longstanding definition in EPA's (40 C.F.R. § 122.2) and the Corps' regulations (33 C.F.R. 328.3);
2) Delete the word "navigable" from the Act to clarify that the Clean Water Act is principally intended to protect the Nation's waters from pollution, and not just maintain navigability;
3) Make findings that provide the basis for Congress's assertion of constitutional authority over the Nation's waters, as defined in the Act, including so-called "isolated" waters, headwater streams, small rivers, ponds, lakes and wetlands.

This legislation would restore the regulatory status quo prior to the *SWANCC* and *Rapanos* rulings; it does not create "new" Clean Water Act requirements.

Conclusion

In the wake of the *Rapanos* and *SWANCC* decisions – which, at their core, are about what Congress intended when it passed the Clean Water Act – and the misguided "guidance" policies from the agencies, the best solution to this issue is for Congress to reiterate what it intended in 1972 and reaffirm its agreement today with the Act's goal to ensure that all of the Nation's waters will be protected from unregulated pollution and destruction.

For the future health and safety of the country's water resources – and the communities that rely upon them – the only real solution to the problems raised and challenges created by the Supreme Court's decisions is for Congress to pass the Clean Water Restoration Act. We hope today's hearing is a large step towards doing so, expeditiously.

Thank you for considering our views.

Sincerely,

Jon Devine
Senior Attorney
Clean Water Project
Natural Resources Defense Council

Navis Bermudez
Washington Representative
Clean Water Campaign
Sierra Club

Joan Mulhern
Senior Legislative Counsel
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Environmental Integrity Project

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National Policy Director
Clean Water Action

wR

State of New Mexico
Office of the Governor

Bill Richardson
Governor

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July 12, 2007

The Honorable John D. Dingell
United States House of Representatives
Washington, DC 20515

The Honorable James L. Oberstar
United States House of Representatives
Washington, DC 20515

Dear Representatives Dingell and Oberstar:

The citizens of New Mexico recognize that our State's waters are essential to our culture, our health and well-being, and to our economic future. Therefore, I offer my support for the Clean Water Authority Restoration Act of 2007 and join you in protecting our Nation's waters in accordance with the original intent of the federal Clean Water Act.

In the southwest, water is in particularly limited supply, which underscores the need for well-defined robust federal protection under the Clean Water Act. In New Mexico alone, the aftermath of Supreme Court decisions *SWANCC (2001)* and *Carabel* and *Rapanos (2006)* have left 84 miles of perennial streams, 3,900 miles of intermittent waters, 4,000 playa wetlands, and numerous headwaters, springs, cienegas and isolated wetlands with limited federal protection. In addition, closed basins which comprise 20 percent of New Mexico's land area are considered to now fall outside of the jurisdiction of the Clean Water Act. Loss of federal protection leaves these and a significant portion of the Nation's critical waters exposed to destruction and pollution. In addition, the recent Supreme Court rulings have led to confusion regarding the scope of federal protection under Clean Water Act programs, which in turn has caused uncertainty and the potential for environmental degradation.

The goal of the Clean Water Act is clear and necessary: to restore and protect the chemical, physical, and biological integrity of the waters of the United States. This is a goal that can be achieved only through cooperative efforts that include all states, comprehensive protection at the federal level to support state's efforts, and by careful and vigilant attention to our aquatic ecosystems. To remove protection afforded by the Clean Water Act from critical portions of our Nation's aquatic systems and to protect only selected reaches of our waters will result in real costs for our citizens – costs to the economy, the environment and to our quality of life.

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The Clean Water Authority Restoration Act of 2007 provides a logical and practical solution by restoring the traditional scope of the Clean Water Act and clarifying the purpose of the Act based on long-standing regulatory definitions. This is not an expansion of federal authority but a return to a clear and comprehensive common goal. This action will also allow continued state-federal partnerships to provide streamlined and efficient regulatory programs such as those that have been in operation for more than 30 years.

The Citizens of New Mexico depend on the protection of a clean environment and sustainable water supply to serve our needs and the quality of life for future generations. If we are to ensure that New Mexico's waters and the nation's waters are protected now and for future generations, we must act collectively to restore the purpose, the scope, the clarity and the predictability of the Clean Water Act so that it will once again serve as the primary and comprehensive protection of our Nation's waters.

Therefore, I fully support the Clean Water Authority Restoration Act of 2007.

Sincerely,

Bill Richardson

Bill Richardson
Governor of New Mexico

BR/zw

Cc: NM Congressional Delegation:
Senator Pete Domenici
Senator Jeff Bingaman
Representative Steve Pearce
Representative Heather Wilson
Representative Tom Udall

Before the House Committee on Transportation and Infrastructure's Hearing on the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Testimony of David A. Lipstreu, AICP, Member, Northeast Ohio Watershed Council for Grand River Partners, Inc.

August 9, 2007

I would like to thank the members of the Committee for this opportunity to present testimony in support of H.R. 2421, the Clean Water Restoration Act. In my 30 plus years as a professional land planner, I have had many opportunities to evaluate the far reaching impacts of land development upon the water resources of northeast Ohio. Beginning in the early 1970's I became involved with the Northeast Ohio Areawide Coordinating Agency (NOACA) and the Four County Panning and Development Organization (NEFCO) as a member of those organization's Lake Erie Basin Water Quality Management Committees. Our task was to develop section 208 (of the Clean Water Act) water quality management plans to address non point-source water pollution in the Lake Erie drainage basin of northeast Ohio.

In the early 1980's, I began my career as a planner with the city of Aurora, Ohio. One of my first responsibilities was to assure that the city was actively involved in the "208" planning process being conducted by NOACA and NEFCO. At that time, the section 201 (of the Clean Water Act) construction grants program for municipal wastewater improvements was tied to the adoption by local units of government, through their respective MPO, of a 208 Water Quality Management Plan. Failure to adopt a plan would result in loss of the 75% federal funding share for the construction or expansion of sewage treatment facilities. Looking back at the 208 planning process, I am amazed at how prescient it actually was in attempting to address water pollution on an areawide scale. The value of wetlands in providing free stormwater management was clearly recognized, in addition to providing vital habitat for wildlife, waterfowl and fish. The 208 plans also recognized the important function of headwater streams and other tributaries in enhancing water quality, providing aquifer recharge (like wetlands) and in attenuating stormwater flow. Vegetated buffers along rivers and streams were also recommended to minimize stream bank erosion and the resulting sediment that ultimately ends up in Lake Erie. It is noteworthy that today, under the recently enacted Phase 2 Stormwater Regulations, sediment is considered a pollutant.

The period of the mid 1980's through the late 1990's was a time rapid growth in Aurora. The provision of sanitary sewers to the northwest quadrant of the city (ironically, where the majority of the wetlands are located) enabled large tracts of land to be developed for residential use. The resulting increase in impervious area resulted in increased volumes of stormwater that heretofore had not been experienced in this former "bedroom" community." Ironically, the flooding problems weren't occurring in the new developments, but in the older existing subdivisions. Water that drained to undeveloped land now had nowhere to go. Those formerly pervious areas that included open fields, woodlands and wetlands, became covered with asphalt, concrete and rooftops. And curiously, as the pace of development increased, a change in the judicial view of property rights, and control of local land use under home rule provisions of state constitutions, began to occur as did number of cases challenging zoning regulations before the U.S. Supreme Court. Similarly, provisions of the Clean Water Act as they related to the filling of wetlands were called into question and reinterpreted by the Supreme Court under the SWANC and Rapanos decisions to redefine the waters of the United States. Wetlands and other bodies of water previously afforded protection for the manifest benefits that they provided, became available for development. The original intent of the Clean Water Act in defining and safeguarding the Waters of the United States has been subverted.

In my nearly thirty years as planning director for the city of Aurora, I experienced first hand, the critical importance of implementing good development policies and regulations on both the local and regional levels of government. Keeping development out of flood plains and away from river or stream banks, and avoiding a wetland when other alternatives exist, is essential to maintaining water quality and mitigating costly stormwater impacts. In Aurora, during my tenure, the city developed and adopted riparian and wetland setback regulations, along with subdivision and site development regulations that encouraged low impact approaches to developing land. It makes absolutely no sense to permit the filling of wetlands in an area already plagued with severe stormwater control problems. And the courts shouldn't be second guessing the local officials whose familiarity with the problem far exceeds that of federal officials. Furthermore, it is a mistake to believe that a community with development standards that place a high value on protecting the environment can't be an economically viable place to do business. People desire to live in quality communities where environmental protection and economic development support one another. The two are not mutually exclusive!

In conclusion, I strongly urge you support the Clean Water Restoration Act. It is imperative that we stop backsliding into the past where total disregard for the environment has cost us dearly. You are the creators and implementers of policy. You must send a clear message that the protection of our country's water resources is of the highest priority, and that it is expected that the courts will follow suit in upholding these standards consistently.

Once again, thank you for the opportunity to present testimony on this important legislation.

Before the House Committee Transportation and Infrastructure's Hearing on the Status of the Nation's Waters, including Wetlands Under the Jusrisdiction of the Federal Water Pollution Control Act

Testimony of Jennifer McKay
Policy Specialist, Tip of the Mitt Watershed Council

August 10, 2007

Chairman Oberstar and members of the Committee, thank you for the opportunity to submit testimony on the status of the Nation's Waters under the jurisdiction of the Federal Water Pollution Control Act. As a means of introduction, Tip of the Mitt Watershed Council, founded in 1979, is a nonprofit organization whose purpose is to protect, restore, and enhance water resources, including inland lakes, rivers, wetlands, groundwater, and the Great Lakes. We base all our programs on sound science and policy analysis, and have garnered respect for our work from local, state, and federal agencies, businesses, fellow environmental organizations, and citizens. As the lead organization for water resources protection in Antrim, Charlevoix, Cheboygan, and Emmet Counties, the Watershed Council is working to preserve the heritage of Northern Michigan - a tradition built around our magnificent waters.

My testimony focuses on the functions and values of Michigan's wetlands, the importance of protecting wetlands and other waterways to restoring the health of the Great Lakes, and the need to act now to protect our invaluable water resources.

Values of Wetlands

Great Lakes wetlands are considered to be some of the most valuable ecological areas in the Great Lakes and are critical to the Great Lakes ecosystem as a whole. Wetlands are complex ecosystems that provide many ecological functions that are valued by society. In Michigan, these functions become increasingly significant as we continue to lose wetlands. The valuable, ecological functions of wetlands and the aesthetically pleasing open space they provide enhance the quality of life for Michigan residents and visitors. If left intact, wetlands provide a range of important functions, including:

Fish and Wildlife Habitat

Fish and wildlife habitat is the most widely celebrated and actively enjoyed wetland function. Some species spend their entire lives in wetlands, while others utilize them intermittently for feeding or rearing their young. Simply put, wetlands provide critical habitat for Michigan's wildlife. Most freshwater fish are considered wetland dependent. Fish feed in wetlands or on food produced there. Wetlands serve as nursery grounds for many species whose young take cover there, and many important sport fishes spawn in or near wetlands. Like fish, many bird species are dependent on wetlands for either migratory resting places, breeding or feeding grounds, or cover from predators. It is estimated that more than one-third of all bird species in North America rely on wetlands for at least one of these purposes. Nearly all of Michigan's amphibians are wetland dependent, especially for breeding. Amphibians are sensitive to changes in wetland quality and quantity. Many scientists correlate declines in amphibian populations with wetland degradation worldwide.

Threatened and Endangered Species Habitat

Wetland habitats are critical for the survival of threatened or endangered species. These species represent a unique element of Michigan's valuable natural heritage. More than one-third of all threatened or endangered animal species in the United States live in wetland areas or depend on wetlands for some part of their life cycle. This is especially critical considering that wetlands comprise only about five percent of the lower 48 United States. Examples of Michigan's threatened or endangered animals that rely on wetlands include the bald eagle, osprey, common loon, and king rail. According to the Michigan Natural features inventory, of Michigan's total 395 threatened, endangered, rare, and special concern plant species, 194 of them are found in wetland habitats. Thus, nearly 50% of Michigan's plants of management concern reside in less than 15% percent of Michigan's surface area.

Water Pollution Control

A major function of wetlands is the preservation of water quality. In a sense, wetlands function like living filters by trapping polluting nutrients and sediments from surface and ground water. Although less well-known than providing fish and wildlife habitat, this wetland function is important to the integrity of aquatic ecosystems and can influence all other functions. In the Great Lakes Region, the massive algae blooms and depleted dissolved oxygen levels of Lake Erie in the early 1970s is a classic example of what happens to an aquatic system under the strain of too many pollutants including nutrients. Wetlands retain or remove nutrients in four ways: 1) uptake by plant life, 2) adsorption into sediments, 3) deposition of detritus (organic materials), and 4) chemical precipitation. The most significant of these is the uptake of nutrients by plants (which occurs primarily during the growing season, the same time that lakes and streams are most sensitive to nutrient inputs) and adsorption into sediments.

Sediment Control

As sediment-laden water flows through a wetland from the surrounding watershed, the sediments are deposited in the wetland. This reduces siltation into lakes, rivers, and streams. A combination of wetland vegetation and generally flat topography serves to slow water flow and increase deposition of silt and organic matter (carbon compounds). Because of the soil chemistry in wetlands, carbon compounds that are deposited in wetlands decompose very slowly. In this manner, wetlands serve as a relatively permanent resting place for carbon compounds. This function of wetlands can help trap carbon that would otherwise accumulate in the upper atmosphere and contribute to global climate change. Furthermore, there is a strong tendency for heavy metals and other toxic chemicals to attach to the sediment particles found in surface water runoff. Wetlands can trap these human-induced pollutants and remove them from the water column. However, when the natural ability of a wetland to function as a filter is overstressed from human inputs, the wetland and its functions can be destroyed. In fact, when overloaded, wetlands can actually become sources of pollutants, exporting materials that have been filtered and stored for centuries.

Barrier to Waves and Erosion

In their natural condition, wetlands function as a barrier to erosion along shorelines. The root systems of wetland plants stabilize soil at the water's edge and enhance soil accumulation at the shoreline. Wetland vegetation along shorelines reduces erosion by dampening wave action and slowing current speed.

Water Supply
Wetlands are usually found where the ground water table intersects or is close to the land surface. They are usually sites of springs or seeps where ground water is discharged and are very important for providing high quality water for our lakes and streams. However, some wetlands are found where ground water seeps back into the earth and recharges aquifers. The recharge potential of a wetland varies according to a variety of factors, including wetland type, geographic location, subsurface geology, soil type, and precipitation.

Flood Storage and Conveyance
Wetlands act as a hydrologic sponge, temporarily storing flood waters and releasing them slowly, thus reducing flood peaks and protecting downstream property owners from flood damage. Wetlands and adjacent floodplains often form natural floodways that convey flood waters from upland to downstream points. These functions become increasingly important in urban areas where development has increased the rate and volume of runoff.

Commercial Activity - Hunting, Fishing, Bird Watching, etc.
The biological productivity of Great Lakes wetlands drives the economic engines of the multi-billion dollar hunting, sport fishing, and bird watching industries. Michigan's coastal wetlands bring over 2.4 million birdwatchers to the state and 55,000 waterfowl hunters. In addition, coastal wetlands are important to the success of the commercial fishing industry. The water resources of the Great Lakes ecosystem support a 4.5 billion Great Lakes sport fishery and are essential to the outdoor recreational industry that generates $6.5 billion from fishing, $4.89 from hunting, and $6.4 billion from wildlife watching in the eight Great Lakes states.

Importance of Wetlands to the Health of the Great Lakes
The ecological and economic importance of intact Great Lakes wetlands and inland water resources goes far beyond benefiting Michigan. In May of 2004, the President signed an Executive Order declaring the Great Lakes a "national treasure" and convened a collaboration of national significance to develop a blueprint to restore and protect the Great Lakes. From the Executive Order, the Great Lakes Regional Collaboration was created which completed a comprehensive strategy to restore and protect the Great Lakes. Many of the recommendations with the Great Lakes Regional Collaboration's *Strategy to Restore and Protect the Great Lakes* pertain directly to wetlands. Recommendations within the strategy include:

- Protect and/or restore one million acres of high quality wetlands in the Basin.
- Conserve or restore lakes, streams, rivers, wetlands, and connecting channels to ensure their connectivity to floodplains.
- Protect or restore 10,000 acres of high priority coastal and upland habitats per year across the Basin.
- Protect and restore 1,100,000 acres of upland associated with wetlands.
- Restore, recover, and protect a net increase of 550,000 acres of wetlands within the Great Lakes Basin by 2010.

- Restore, recover, and protect a net increase of 1,000,000 acres (450,000 additional) of wetlands within the Great Lakes Basin by 2015.

To ensure these goals are obtained, Congress must reaffirm the original intent of the Clean Water Act to protect all waters of the United States by enacting the Clean Water Restoration Act. Failure to affirm the original intent of the Clean Water Act creates significant problems for implementation of the recommendations put forth in the *Strategy to Restore and Protect the Great Lakes*. The wetland restoration goals of the Great Lakes Regional Collaboration are undermined by Supreme Court rulings and administrative actions that leave existing wetlands and streams vulnerable to destruction. Without ensuring that all our wetlands and water resources are protected under the law, federal legislators, Great Lakes governors, private businesses, and non-governmental organizations seeking to secure significant funding for a Great Lakes restoration initiative will face even greater obstacles. Michigan, strategically located in the heart of the Great Lakes, has the most to gain (and the most to lose) with regard to Great Lakes restoration and protection. By essentially encouraging degradation of wetland system it makes it hard to argue that Michigan and the Great Lakes region are deserving recipients of billions to restore and protect our ecosystem.

The Need to Act Now

The Great Lakes Basin has already experienced significant wetland losses, an estimated sixty-six percent since settlement. According to the U.S. Fish and Wildlife Service, Michigan has lost approximately one-half of its wetlands resources since European settlement. Therefore, the remaining wetlands are ecologically indispensable. In Michigan, important water resources have already lost Clean Water Act protection. Several miles of headwater streams have been declared off-limits for federal protection by the U.S. Army Corps of Engineers, and protection has been removed from many of Michigan's wetlands, lakes and other waters. The effect of this guidance could remove federal protection from an estimated 930,856 acres of wetlands that are not physically connected to lakes or streams. This acreage represents approximately 17 percent of Michigan wetland resources. Moreover, approximately 271,534 of these acres lack even state protection. Michigan has 51,438 miles of streams and the health of these streams correlates directly to the health of rivers and the Great Lakes. Of these, half are intermittent (they only run part of the year). Due to the guidance and because the term "isolated" is not defined, these streams may lose protection threatening the health of our magnificent, yet vulnerable, Great Lakes.

To prevent future devastating losses, Congress must act now by passing the Clean Water Restoration Act of 2007 (H.R. 2421). The bill would reaffirm the historical jurisdiction of the 1972 Clean Water Act and ensure all "waters of the United States" that have been covered by federal safeguards against pollution for more than 34 years retain Clean Water Act protection. This bill does not create "new" protective authority, but simply restores the regulatory status quo. The bill is needed because decisions by the Supreme Court over the past few years, Rapanos/Carabell 2006, SWANCC 2001, and administrative actions by the Environmental Protection Agency and Army Corps of Engineers have muddied the waters regarding the jurisdiction of the Clean Water Act, making this bill critically important now.

The Clean Water Restoration Act will return us, in Michigan and throughout the country, to the path toward further progress in cleaning up the nation's waters and making them safe and clean.

Conclusion

We commend Chairman Oberstar, and the members of the committee for your leadership in scheduling this hearing. The Great Lakes are some of the most magnificent natural resources on Earth, holding nearly 20% of the planet's fresh surface water. In addition to the Lakes themselves, the region is richly endowed with high quality inland lakes, expansive forests, blue-ribbon trout streams, prairies, bogs, and the largest freshwater coastal wetlands on Earth. Urgent legislation is needed to protect these resources and our waters. Passage is essential to protecting the myriad of water resources we all love and enjoy in Michigan. The longer the wait, the more wetlands, streams, and rivers we will lose or degrade because of the delay, and the more expensive the investment will be. If we are going to maintain the proud heritage of the Great Lakes, now is the time to protect our wetlands and rivers which are crucial if we are restore and protect the Great Lakes for future generations.

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CLEAN WATER ACTION

Comments for the EPA Water Docket

OW-2002-0050

Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States"

April 16, 2003

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Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States"

April 16, 2003

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PART ONE – Response to ANPRM

I. INTRODUCTION

These comments, along with the attached exhibits, represent the views of the National Wildlife Federation, Natural Resources Defense Council, Earthjustice, American Rivers, Sierra Club, Ocean Conservancy, Defenders of Wildlife, Appalachian Center for the Economy and the Environment, National Audubon Society, Environmental Defense, and Clean Water Action in response to the questions and requests for comment contained in the Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," (hereafter "ANPRM"), 68 Fed. Reg. 1991, January 15, 2003[1] published by the Environmental Protection Agency and the Department of the Army, Corps of Engineers (hereinafter "the agencies"), ID No. OW-2002-0050.

It is customary when submitting comments in response to an ANPRM or proposed rulemaking to state appreciation for the opportunity to comment on the matter at hand. However, in this instance we think it is important to state at the outset that our organizations do not view this comment process as a welcome "opportunity" but instead as an unwelcome necessity created by the agencies' unnecessary initiation of a process to rewrite the rules of the Clean Water Act.

Congress passed the Clean Water Act more than 30 years ago to "restore and maintain the chemical, physical and biological integrity of the nation's waters." While the law has had many successes, an enormous amount of work remains to be done before our country meets this important and common sense goal. Rather than seizing on the task at hand, the agencies responsible for protecting the nation's waters have instead presented the American public with the absurd suggestion that the jurisdictional scope of the Clean Water Act should be narrowed by creating a regulatory category of so-called "isolated" waters and leaving those waters outside the protections of the Act.

This proposal is flatly contrary to the letter, purpose and original intent of Congress in 1972 and in subsequent Congresses that amended the Act but reaffirmed its scope. It represents terrible public health, environmental and economic policy, and is scientifically indefensible. It is not justified by the agencies' legal arguments that cannot withstand honest scrutiny. It would set environmental policy back by decades, as it is the most sweeping effort to restrict Clean Water Act protections made by any administration since the law was passed.

We begin our comments with a discussion debunking the claim made in the January 15 notice that a rulemaking is necessitated by the U.S. Supreme Court's decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (hereafter "*SWANCC*") 531 U.S. 159 (2001). In fact, nothing in the *SWANCC* decision compels any change to the longstanding definition of waters of the United States used by both EPA and the Corps, as the U.S. Department of Justice has argued consistently in briefs filed in federal courts in the two years since the *SWANCC* decision. We also seek to correct the skewed presentation of post-*SWANCC* case law that is contained in the January 15 ANPRM and attached Guidance. Our comments make clear that both the ANPRM and Guidance go far beyond any change in law or policy necessitated by the narrow holding in *SWANCC*.

---

[1] The comment deadline was extended from March 3 to April 16, 2003 by notice in 68 Fed. Reg. 9613 (February 28, 2003).

We next provide a short summary of the legislative history of the Clean Water Act illustrating the well-established fact that Congress intended the 1972 amendments to the Federal Water Pollution Control Act to broadly protect waters of the United States, and rejected a proposal to narrow the scope of § 404 of the Act in 1977.

We then provide responses to the questions and requests for information that we have identified in the ANPRM.

Following the responses to those questions and requests for information, we discuss the potential implications of the changes being considered for the effectiveness of several of the key provisions of the Clean Water Act, as well as other statutes including the Safe Drinking Water Act and the Endangered Species Act. We then look at the implications of withdrawing Clean Water Act protection for two important ecological regions – Alaska's North Slope and the Appalachian highlands.

Finally, in Part Two of these comments, we provide comment on the Guidance for EPA and Corps field staff included as an attachment to the ANPRM.

We hope that EPA and the Corps will consider these comments, as well as the tens of thousands of comments from the public, state agencies, hunters and anglers, scientists and others opposing a rulemaking and will abandon this misguided and monumentally destructive project at the earliest possible date.

II. THERE IS NO NEED FOR RULE CHANGES

A. THE ADVANCED NOTICE OF PROPOSED RULEMAKING AND GUIDANCE, NOT *SWANCC*, CREATE UNCERTAINTY IN CWA JURISDICTION

The central premise of the ANPRM is that although the scope of *SWANCC* is clear on its face, it somehow "calls into question whether CWA jurisdiction over isolated, intrastate, non-navigable waters could now be predicated on the other factors listed in the 'Migratory Bird Rule' or other rationales of 33 C.F.R. § 328.3(a)(3)(i)-(iii)." 68 Fed. Reg. 1993. Contrary to the ANPRM's assertion, neither *SWANCC* itself, earlier or subsequent judicial decisions, nor EPA's now long-standing and consistent interpretations of *SWANCC*, create any uncertainty over the scope of the CWA's jurisdiction. The only uncertainty that has been introduced since the *SWANCC* decision was issued is the issuance of the ANPRM and its accompanying Guidance and a handful of aberrant judicial decisions, all of which EPA has opposed and/or appealed. Because the

ANPRM and the new Guidance do not further the public's interest in clarifying what waters are subject to CWA jurisdiction and instead create uncertainty not projected by *SWANCC*, the environmental commenters request that EPA take no further rulemaking action and that EPA and the Corps withdraw the informal Guidance.

EPA's contention that *SWANCC* invites the agency to reconsider its longstanding definition of "waters of the United States" to include intrastate waters which could affect interstate or foreign commerce is not supported by *SWANCC*'s analysis. In *SWANCC*, the Supreme Court applied the CWA's definition of waters to a specific set of facts. It is clear that, in those specific facts — "isolated," intrastate, non-navigable waters only used by migratory birds — the CWA does not apply. However, it also is clear that the CWA does apply to any waters that fall within EPA's and Corps' published definition of "waters of the United States." Indeed, it remains possible that even the "isolated" ponds in *SWANCC* are waters governed by the CWA. *SWANCC*, 2001 WL 312372*1 (7th Cir. 2001). Thirty years of remarkably consistent case law and administrative decisions create a jurisdictional certainty perhaps unparalleled in environmental law. For EPA to proceed with a rulemaking that turns its back on those many decisions will be the only real source of uncertainty regarding the CWA's jurisdictional scope.

1. *SWANCC* Does Not Call Into Question The CWA's Jurisdiction Over "Isolated," Intrastate, Non-Navigable Waters Based On 33 C.F.R. § 328.3(a)(3)(i)-(iii) Or 40 C.F.R. § 122.2

The Court in *SWANCC* limited its holding to the facts before it: "We hold that 33 C.F.R. § 328.3(a)(3) (1999), as clarified and applied to petitioner's balefill site pursuant to the 'Migratory Bird Rule,' 51 Fed. Reg. 41217 (1986), exceeds the authority granted to respondents [the Army Corps of Engineers] under §404(a) of the CWA." 121 S. Ct. at 684. *SWANCC* does not question in any way CWA jurisdiction if regulatory bases *other than* use by migratory birds are present. *United States v. Krilich*, 152 F. Supp.2d 983, 988 (N.D. Ill. 2001), *aff'd* 209 F.3d 968 (7th Cir. 2000). *See Laguna Gatuna, Inc. v. United States*, 50 Fed. Cl. 336, 343 (2001). Nor does *SWANCC* necessarily foreclose CWA jurisdiction based upon use by migratory birds where other connections to "navigable waters" may also generally be present. Hence, *SWANCC* does not question any of the published criteria set forth at 33 C.F.R. § 328.3(a)(3)(i)-(iii).

The Supreme Court's concern that the presence of migratory birds on isolated, nonnavigable, intrastate waters was insufficient to fall within "navigable waters" as defined by the CWA does not touch on subparagraphs (i) through (iii) of 33 C.F.R. § 328.3(a)(3)(i)-(iii) or its EPA counterpart at 40 C.F.R. § 122.2 ("waters of the United States"). Neither of those provisions define waters of the United States based solely on their use by migratory birds. As discussed below, the reasoning of both *Riverside Bayview* and *SWANCC*, and the underlying CWA, clearly support the Corps' and EPA's inclusion as "waters of the United States" those waters actually or potentially used by interstate and foreign travelers for recreational purposes; by persons engaged in fishing or harvesting shellfish that may be sold outside the state where the harvesting occurred or; by interstate industries for industrial or other purposes. Indeed, there is no indication that any other use besides migratory birds was made of the ponds at issue in *SWANCC*. 121 S. Ct. at 678-79. Thus, had the Corps produced evidence of actual or potential use of those ponds by out-of-state hunters or anglers, there is nothing in *SWANCC*'s rationale that would preclude CWA jurisdiction. This was recognized by the Seventh Circuit's remand of the decision back down to the district court. *SWANCC*, 2001 WL 312372*1 (7th Cir. 2001) ("If the district court concludes that the Corps' authority in this case rests solely on the Migratory Bird Rule, it must dismiss the action. If it finds another proper basis for jurisdiction, then it shall conduct further proceedings . . ."). As a result, EPA and the Corps should leave 33 C.F.R. § 328.3(a)(3)(i)-(iii) as is, as currently implemented by existing cases and agency decisions.

2. *SWANCC* Does Not Call Into Question The CWA's Jurisdiction Over Non-Navigable Tributaries To Navigable Waters

Although the ANPRM does not initially suggest that the *SWANCC* decision creates uncertainty regarding CWA jurisdiction over non-navigable tributary waters, the ANPRM subsequently hints at such an impact in the Guidance and by requesting comments on whether to define "isolated waters" and impacts to implementing TMDLs. 68 Fed. Reg. 1994, 1995, 1997. Despite those hints, *SWANCC* does not question CWA jurisdiction over any non-navigable, tributary waters. *SWANCC* does not question 33 C.F.R. § 328.3(a)(5) or the well-settled case law holding that CWA jurisdiction extends to tributaries of navigable waters as well as wetlands adjacent to such tributaries. Indeed, by reconfirming *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985), the Supreme Court remains clear that tributary waters, even if they are non-navigable wetlands, are "waters of the United States."

Since the issuance of the *SWANCC* decision, case law is essentially unanimous in holding that non-navigable tributaries that ultimately flow, albeit for long distances and through natural and man-made channels, are waters of the United States governed by the CWA. *See Headwaters, Inc. v. Talent*, 243 F.3d 526, 533-34 (9th Cir. 2001); *California Sportfishing Protection Alliance v. Diablo Grande, Inc.*, 209 F. Supp.2d 1059, 1074-76 (2002); *United States v. Buday*, 138 F. Supp.2d 1282, 1295 (D. Mont. 2001); *Idaho Rural Council v. Bosma*, 143 F. Supp.2d 1169, 1178 (D. Idaho 2001); *Community Ass'n for Restoration of the Env't v. Henry Bosma Dairy*, 305 F.3d 943, 954-55 (9th Cir. 2002); *United States v. Interstate Gen'l Co.*, 152 F. Supp.2d 843, 847 (D.Md. 2001), *aff'd* 2002 WL 1421411 (4th Cir. July 2, 2002) (unpublished decision) [*on remand from United States v. Wilson*, 133 F.3d 251 (4th Cir. 1997)]; *Aiello v. Town of Brookhaven*, 136 F.Supp.2d 81, 119 (E.D.N.Y. 2001); *United States v. Lamplight Equestrian Center, Inc.*, 2002 WL 360652*5 (N.D.Ill. March 8, 2002); *Fisher v. Chestnut Mountain Resort, Inc.*, 2002 WL 433144 (N.D.Ill. March 19, 2002). These many cases continue the jurisprudence that existed prior to *SWANCC*. *See United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th Cir. 1979); *United States v. Eidson*, 108 F.3d 1336 (11th Cir. 1997); *United States v. Ashland Oil & Transp. Co.*, 504 F.2d 1317 (6th Cir. 1974).

The few district court decisions that have expanded the concept of "adjacent waters" to exclude non-navigable, tributary waters improperly expand the holding in *SWANCC* and fail to appreciate that decision's reading of *Riverside Bayview*. In *Riverside Bayview*, the Supreme Court held that, in addition to other waters, waters that "tend to drain" into navigable waters are adjacent waters. 474 U.S. at 134. By definition, all tributaries not only "tend to drain" into adjacent navigable waters, they in fact drain into such waters. Nor can it rationally be argued that a tributary is not adjacent to the waters into which it drains. More than "adjacent," those waters are, in fact, one and the same.

It also is clear from *Riverside Bayview* that such waters need not, in fact, drain pollutants into downstream navigable waters in order for jurisdiction to attach. *Id.* Indeed, the whole purpose of jurisdiction and the issuance of a CWA permit, whether it be a dredge and fill permit or a NPDES permit, is to prevent any such discharge. *See id.* at 134 ("wetlands may serve to filter and purify water draining into adjacent bodies of water"); 133 (quoting S. Rep. No. 92-414, p. 77 (1972) ("it is essential that discharge of pollutants be controlled at the source").

Hence, the four district court judges who have chosen to read *SWANCC* beyond its actual holding are inconsistent with *Riverside Bayview* and numerous other decisions, as EPA itself has held and argued numerous times to date. *See United States v. Rapanos*, 190 F. Supp.2d 1011 (E.D.Mich. 2002), appeal pending, Case No. 02-1377 (6th Cir.); *United States v. Newdunn Assoc.*, 195 F. Supp.2d 751 (E.D.Va. 2002), appeal pending (4th Cir.); *In re James Hamilton Needham*, 279 B.R. 515 (W.D.La.Bank.Ct. 2001), *aff'd United States of America v. Needham*, 2002 WL 1162790 (W.D.La. Jan. 22, 2002); *United States v. RGM Corp.*, 222 F. Supp.2d 780 (E.D. Va. 2002); *FD&P Enterprises, Inc. v. United States Army Corps of Engineers*, No. 99-3500 (HAA), slip op. (Jan. 15, 2003). In addition, there is one Circuit Court of Appeals decision misconstruing *SWANCC*. See Rice v. Harken, 250 F.3d 264 (5th Cir. 2001) (*rehearing denied*, 263 F.3d 167 (2002)). This aberrant ruling was opposed by the Department of Justice, which sought a rehearing of the decision.

EPA should not alter the course evidenced by its existing administrative rulings and court briefs. EPA should not proceed with any rulemaking reconsidering either 33 C.F.R. § 328.3(a)(5) or the CWA's jurisdiction in general over all tributary waters.

3. The ANPRM's Suggestion That *SWANCC* Creates Uncertainty Over The CWA's Jurisdiction Beyond Its Express Holding Is Contrary To EPA's Administrative Rulings And Litigation Positions

To date, with the exception of the ANPRM and the ill-considered Guidance, EPA has repeatedly determined through numerous formal adjudications and litigation briefs that no uncertainty regarding the scope of the CWA's jurisdiction was left in the wake of *SWANCC*. Time and time again, EPA correctly has determined that the Supreme Court's *SWANCC* decision was limited to the specific facts of that case and did not call into question either the jurisdictional bases identified in EPA's and the Corps' regulations or previous court rulings regarding CWA jurisdiction over tributary and other waters. *See, e.g. In the Matter of Bricks Inc.*, 2002 WL 31357038 (Office of the Administrator, Oct.9, 2002); *In the Matter of Wolco, Inc.*, 2002 WL 31264259 (Office of the Administrator, Sept. 9, 2002); *In the Matter of Ray and Jeanette Veldhuis*, 2002 WL 1493840 (Office of the Administrator, June 10, 2002); *In re: Larry Richner/Nancy Sheepbouwer & Richway Farms*, CWA Appeal No. 01-01 (EPA Envt'l Appeals Board, July 22, 2002); *In the Matter of C.L. "Butch" Otter*, 2001 WL 388944 (E.A.B. Apr. 9, 2001); *In the Matter of C.W. Smith et al.*, 2002 WL 257696 (EPA Office of the Administrator, Feb. 6, 2002); *In the Matter of Crown Central Petroleum Corp*, 2002 WL 56519 (Office of the

Administrator, Jan. 8, 2002). Likewise, each of the outlier district court decisions that have attempted to read a broader ruling into *SWANCC* have done so over the express objection of EPA and/or the Corps. *See* Government's Briefing in *Rapanos*, *Newdunn Assoc.*, *RGM Corp.*; *FD&P Enterprises, Inc.*

4. Any Rule Attempting To Expand The *SWANCC* Decision Beyond Its Explicit Holding Will Not Clarify CWA Jurisdiction And Will Invite Uncertainty

EPA's ANPRM and Guidance unfortunately embolden dischargers' attorneys into the false belief that *SWANCC* may go beyond its explicit holding. Because it is clear that the Supreme Court's decision is limited to the specific facts of *SWANCC* and the Court's precisely stated ruling, the very act of publishing the ANPRM and Guidance has undermined the goal to which EPA claims to ascribe — regaining purportedly lost clarity on the scope of the CWA's jurisdiction. Although it cannot be denied that *SWANCC* has limited the jurisdiction of the CWA, that limitation only extends to the precise waters and rationales addressed by *SWANCC*. Even while implying uncertainty, EPA obviously understands the limited extent of the *SWANCC* decision. 68 Fed. Reg. 1994. However, by now suggesting that *SWANCC* casts doubt on other jurisdictional bases under the CWA to the extent that a proposed rulemaking may be necessary to "clarify CWA jurisdiction," EPA already is taking a position that will further undermine the clarity that now exists. 68 Fed. Reg. 1994.

As *SWANCC* demonstrates, neither EPA nor the Corps is the final arbiter of the scope of the CWA's jurisdiction. Were the agencies to change their long-settled rulings on CWA jurisdiction that were not addressed by *SWANCC* and that have been upheld by numerous other judicial decisions, it would simply encourage conflicting decisions amongst the many district courts and perhaps the courts of appeals. Most courts presumably would not defer to EPA's latest interpretation and instead follow existing case law. However, as EPA has seen, such a decision would encourage some district courts to judicial activism in an effort to improperly restrict application of the CWA. In any event, it is certain that, rather than clarity, a course to alter the current regulations would result in even more litigation and more uncertainty over the CWA's jurisdiction for an indefinite period of time. That scenario will be to the great detriment of EPA's ability to enforce the CWA. It also will place much greater burdens on EPA, the Corps and state agencies to implement the CWA. It likely will be even to industry's disadvantage, encouraging costly litigation that may or may not prove successful.

Just as it is improper for a lower court to base its rulings on implicit holdings of higher courts or by drawing "inferences from opinions which did not address the question at issue," it would be equally disingenuous of EPA or the Corps to begin implying hidden meanings in the *SWANCC* decision or proceeding with amendments to long standing rules upheld on numerous occasions by the courts based on perceived inferences in *SWANCC* that did not address those rules. *Texas v. Cobb*, 121 S. Ct. 1335, 1341 (2001). Certainly, such a course of action would create a relative avalanche of uncertainty well beyond the alleged uncertainty over issues not addressed by *SWANCC* that purportedly has been generated by a handful of mistaken district court decisions and self-serving interpretations of *SWANCC* offered up by the discharger community.

5. EPA's Guidance Creates Uncertainty That is Not Otherwise Present

Unfortunately, EPA and the Corps already have taken a step to promote uncertainty by issuing their new Guidance. Dropping any pretense, the Guidance asserts, contrary to every ruling of EPA and the agency's position in numerous pending lawsuits that "in light of *SWANCC*, it is uncertain whether there remains any basis for jurisdiction under the other rationales of § 328.3(a)(3)(i)-(iii) . . . ." 68 Fed. Reg. at 1996. In order to justify this new interpretation of the effect of *SWANCC*, EPA and the Corps appear to rely on the few district court decisions which they themselves have appealed as claimed bases of alleged uncertainty stemming from *SWANCC*. The government's own administrative decisions and court briefs make clear that it does not agree with the main premise of the Guidance, *i.e.*, that *SWANCC* creates uncertainty. The notion that a Guidance would rely on decisions that the guiding agencies are appealing for any rationale, nevermind the raison d'etre of the Guidance, is entirely inconsistent and arbitrary. The apparent deference afforded by EPA's Guidance to the minority of court rulings attempting to expand *SWANCC*'s analysis is contrary to EPA's administrative rulings and litigation positions, not to mention numerous pre- and post-*SWANCC* court decisions. By undermining its own well-established positions, EPA and the Corps create, rather than limit, uncertainty. As a result, the best way for EPA to promote certainty is to withdraw the "clarifying" Guidance and abandon its consideration of a new rulemaking defining "waters of the United States."

B. THE LEGISLATIVE HISTORY DEMONSTRATES CONGRESS' INTENT THAT THE CWA APPLY FULLY TO ALL TRIBUTARIES TO NAVIGABLE WATERS, HEADWATER STREAMS, AND "ISOLATED" WATERS

1. The 1972 Act

The ANPRM suggests revisions to the existing Clean Water Act definition of "waters of the U.S." that are entirely inconsistent with the letter, purpose, and scope of the 1972 Clean Water Act. That law was enacted with the purpose of eliminating pollution of the nation's waters – a purpose that can only be effectuated if the law is comprehensive, as Congress clearly recognized 30 years ago. The existing and long-standing regulations defining the jurisdictional scope of the Act implement this congressional purpose. Any effort to limit the scope of the Act by administrative action is inconsistent with the law and would leave waters Congress clearly meant to include outside the scope of Clean Water Act protection.

a. In passing the Clean Water Act in 1972, Congress established broad new authority to restore and protect all waters, and articulated equally broad new jurisdictional authority to do so

The Clean Water Act was adopted in 1972 as the Federal Water Pollution Control Act Amendments of 1972.[2] With the passage of the Clean Water Act, the United States made a national commitment to comprehensively control water pollution.

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[2] Pub. L. No. 92-500, 86 Stat. 816 (1972).

Before the Clean Water Act, Congress passed the original Federal Water Pollution Control Act (FWPCA).[3] Its first efforts were limited to providing technical assistance to states, partial financing of municipal sewage treatment works and authority to bring public nuisance lawsuits to abate interstate water pollution when all other means failed. States were left to establish treatment requirements for pollution sources and to enforce them.

By the 1960s the deterioration of the nation's waters was alarmingly evident. Symbolic of their disastrous state was the Cuyahoga River, running through Cleveland, Ohio into Lake Erie. It became so polluted with industrial waste in the 1960s that it caught fire on more than one occasion. Lake Erie itself became so polluted from municipal and industrial waste and agricultural runoff that it supported algae blooms forty miles long and was projected to become biologically dead. Spills off the coast of California blanketed hundreds of miles of coastline with oil. Waterways in many cities across the country were reduced to sewage receptacles for industrial and municipal waste. The rate of wetlands loss was approximately 450,000 acres per year.[4] Leaving the problem to individual states to resolve was not working.

Public outcry demanded a strong response. There was a general – and accurate – perception that past approaches relying on state-by-state water quality standards alone was not cleaning up the waters and, indeed, waters were becoming more polluted. There was clearly a need for a broader federal role to address water pollution.

The 1972 Act, passed as an amendment to the existing FWPCA, was universally described as the first truly comprehensive federal water pollution legislation.[5] As stated by Senator Randolph, Chairman of the Senate Committee on Public Works: "It is perhaps the most comprehensive legislation that the Congress of the United States has ever developed in this particular field of the environment."[6] Congressman Blatnik, Chairman of the House Public Works Committee characterized it as a "landmark in the history of environmental legislation."[7]

The law's comprehensive nature was largely in recognition that existing state and federal attempts to address pollution were wholly inadequate. As Senator Edmund Muskie, the floor manager of the bill in the Senate, told the Senate when introducing the bill that was to become the new Clean Water Act:

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[3] Pub. L. No. 80-845, 62 Stat. 1155 (1948).

[4] Frayer et.al. Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950sto 1970s," USFWS National Wetlands Inventory (April 1983)

[5] S. Rep. No. 92-414, p. 95 (1971).

[6] 2 Legislative History of the Water Pollution Control Act Amendments of 1972 (Committee Print compiled for the Senate Committee on Public Works by the Library of Congress) Ser. No. 93-1, p. 1269 (1973).

[7] *Id.*

> The committee on Public Works, after 2 years of study of the Federal water pollution control program, concludes that the national effort to abate and control water pollution is inadequate in every vital aspect.[8]

b. The Goals and Purposes of the Act Indicate Congressional Intent to Assert Federal Authority to the Full Extent Allowed by the Commerce Clause

With the passage of the Clean Water Act, Congress articulated one of the broadest ecosystem restoration and protection aspirations in all of environmental law. This objective, to reverse the many years of degradation of the nation's waters and to make them again capable of supporting aquatic life and recreation, is far removed from the limited goal of protecting navigation as in earlier laws like the Rivers and Harbors Act of 1899,[9] or largely limiting itself to pollution in interstate waters as in the earlier iterations of the Federal Water Pollution Control Act.[10] The very first sentence of the 1972 statute states "The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[11]

"To achieve this objective,"[12] Congress listed seven goals, each of which indicates concern for values other than navigability. The goals of the law, including "protection and propagation of fish, shellfish, and wildlife," "recreation in and on the water," elimination of "the discharge of toxic pollutants in toxic amounts," and "programs for the control of nonpoint source pollution" are mentioned.[13] Moreover, both the House and Senate report evinced their intent to restore aquatic ecosystems as closely as possible to their natural state – an intent which clearly extends beyond the traditional intent to provide for navigation.[14]

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[8] 117 Cong. Rec. 17397 (daily ed. Nov. 2, 1971).

[9] Rivers and Harbors Act of 1899, 33 U.S.C. § 401 *et seq.* (1994).

[10] Federal Water Pollution Control Act, Pub. L. No. 80-845, 62 Stat. 1155 (1948).

[11] 33 U.S.C. § 1251.

[12] 33 U.S.C. § 1251(a).

[13] *See* 33 U.S.C. § 1251.

[14] The Senate report stated, "Maintenance of such integrity requires that any changes in the environment resulting in a physical, chemical or biological change in a pristine waterbody be of a temporary nature, such that by natural processes, within a few hours, days or weeks, the aquatic ecosystem will return to a state functionally identical to the original." 1972 U.S.C.C.A.N. at 3742. Similarly the House report explains "The word 'integrity'... is intended to convey a concept that refers to a condition in which the natural structure and function of ecosystems is maintained." H.R. Rep. No. 92-911 at 76-77 (1972).

c. The Clean Water Act's Structure Further Indicates Congressional Intent to Assert Jurisdiction Broadly Over "Waters of the U.S."

The structure as well as the letter of the law reveals that the drafters of the 1972 Clean Water Act understood that discrete components of aquatic ecosystems cannot be viewed in isolation, and must be more properly viewed as interrelated parts of connected hydrological and ecological systems and cycles.

The Act commands agencies to give "due regard" to "improvements which are necessary to conserve such waters for the protection and propagation of fish and aquatic life and wildlife [and] recreational purposes."[15] And generally, Congress directed federal agencies in § 102 to "develop comprehensive programs for preventing, reducing or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground waters.[16]

In passing the Clean Water Act of 1972, Congress targeted its statutory amendments at the broadest of goals, and the scope of statutory jurisdiction must be read with these purposes and objectives in mind. The purposes for which the Clean Water Act was passed, and the structure of the Act itself clearly indicate that Congress was concerned with protecting all waters of the United States, not merely those used or implicated by navigation. This understanding of the scope of the Act is additionally supported by the legislative history of the definition of the term "navigable waters."

d. The Legislative History of the Term "Navigable Waters" Indicates Congressional Intent to Broadly Cover Waters of the United States, Not Just Traditionally Navigable Waters

Congress chose to broadly define the waters covered by the Act. Congress accomplished this goal by redefining the operative term "navigable waters," which it borrowed from the Rivers and Harbors Act, in a manner that reached far beyond the limited category of traditionally navigable waters. As both the statute and the legislative history make clear, "navigable waters" was broadly defined by Congress and intended to be interpreted that way in order to achieve the numerous objectives articulated throughout the Act that do not pertain to navigability. Congress accomplished this jurisdictional expansion by deleting the term "navigable" from the existing definition of "navigable waters."

Both the House and Senate versions of the bills to amend the FWPCA were written to expand federal authority to control and ultimately eliminate discharges of all types of water pollution across the country.[17] Both the House and Senate sought to restructure the nation's federal authority to control water pollution while drawing upon much of the structure and language of earlier versions of the FWPCA as well as the Rivers and Harbors Act. Thus, in their respective bills, both bodies borrowed the term "navigable waters" from the RHA, and included a definition that itself used the term "navigable."[18] However, in the reports discussing their respective versions of the legislation, both the House and Senate expressed concern about potential narrow interpretations of what waters they intended to be covered by the Act.

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[15] 33 U.S.C. § 1252.

[16] *Id.*

[17] H.R. 11896, 92nd Cong. (1971); S. 2770 92nd Cong (1971).

The House Public Works Committee stated its concern as follows: "The Committee is reluctant to define the term 'navigable waters.' This is based on the fear that any interpretation would be read narrowly. This is not the Committee's intent. The Committee fully intends the term 'navigable waters' be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."[19]

The Senate Committee on Public Works stated, "Through a narrow interpretation of the definition of interstate waters the implementation of 1965 Act was severely limited. Water moves in hydrologic cycles and it is essential that discharges of pollutants be controlled at the source."[20]

While the House report focused upon the need for a broad constitutional interpretation of the Act's scope, and the Senate report spoke to the scientific reality of waters being interconnected, both bodies signaled their desire not to constrain the reach of the Act to those waters previously protected solely on the grounds of navigability.

When the House and Senate met in conference committee, they took an additional step to ensure that the definition of "navigable waters" did not result in unduly narrow interpretations. As discussed in the report of the Conference Committee, the House version of the definition was accepted into the final bill, but the word "navigable" was deleted from the definition. Thus, the new definition read as follows: "The term 'navigable waters' means ~~navigable~~ waters of the United States, including the territorial seas."[21]

The Conference report spoke to this change, using the exact terminology of the earlier House Public Works Committee report in confirming that the term "must be given the broadest constitutional interpretation," and expressing that the interpretation of this definition must be

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[18] In the Senate, the definition read "the term navigable waters means the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes. S. 2770, 92nd Cong. 502(h) (1971). The House bill's definition read "The term 'navigable waters' means the navigable waters of the United States, including the territorial seas." H.R. 11896, 92nd Cong. 502(8)(1971).

[19] H.R. Rep. No. 92-911 at 76-77 (1972).

[20] S. Rep No. 92-414, 92nd Cong. 77 (1971).

[21] S. Rep. No. 92-1236, 92nd Cong.144 (1971).

"unencumbered by agency determinations which have been made or may be made for administrative purposes."[22]

Finally, the debate in Congress on final passage of the Act confirmed the conference report's intent that the law be given broad application. For example, Congressman John Dingell, who reported the conference committee bill to the House explained the definition in his statement:

> The conference bill defines the term "navigable waters" broadly for water quality purposes. It means all "the waters of the United States" in a geographical sense. It does not mean "navigable waters of the United States" in the technical sense as we sometimes see in some laws.

After reviewing the broad extent of the Commerce Clause authority, Rep. Dingell went on to state:

> Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill. Indeed, the conference report states on page 144: The conferees fully intend that the term navigable waters be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes."[23]

Congress expanded the Act's jurisdictional scope in 1972 because of the new ambitious goals of the Act. For this reason, Congress chose not to retain the traditional definition of the jurisdictional term "navigable waters" from the Rivers and Harbors Act or limit its jurisdictional reach as in earlier versions of the FWCPA. Instead, Congress deleted the word "navigable" from the "navigable waters" definition of the 1972 Act, thereby asserting federal jurisdiction over all "waters of the United States."[24] Congress chose to adopt a new, broader definition to encompass "waters of the United States," as necessary to achieve its stated objectives to rid the nation's waters of pollution.

2. The *Callaway* Case and the Corps' Definition of "Waters of the United States"

Prior to the 1972 amendments to the Federal Water Pollution Control Act, the Army Corps of Engineers had the authority to require permits for discharges into navigable waters and their tributaries under the Rivers and Harbors Act of 1899. After passage of the 1972 amendments, the Corps proposed revisions to its existing permitting regulations to incorporate the new authority and responsibilities it was given under § 404. The Corps proposed revisions on May 10, 1973 and finalized those revisions on April 3, 1974.

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[22] *Id.*

[23] *See* House consideration of the report of the Conference Committee, Oct. 4, 1972, compiled in Legislative History of the Water Pollution Control Act Amendments of 1972, Ser. No. 93-1, 93rd Cong. (1973), at 250-251.

[24] The definition of "navigable water" in earlier version of the FWCPA had made express reference to navigability." 211 80 Stat. 1253.

The Corps' first regulatory definition of "navigable waters[25] for purposes of implementing the 404 program was extremely narrow, applying only to traditionally navigable waters.[26] On June 19, 1974, EPA Administrator Russell Train wrote to the Corps, objecting to the Corps' narrow interpretation of navigable waters and asserting that it was inconsistent with Congress' intent in the 1972 amendments, stating, "Our interpretation of 'navigable waters' within the meaning of the FWPCA does not conform to the Corps' recently issued regulation. We firmly believe that the Conference Committee deleted 'navigable' from the FWPCA definition of 'navigable waters' in order to free pollution control from jurisdictional restrictions based on 'navigability.'" [27] On August 16, 1974, NRDC and NWF sued the Corps, arguing that the Corps' regulations failed to broadly protect waters of the United States as Congress intended. The United States District Court for the District of Columbia agreed that the Corps' definition was too narrow and not what Congress intended. The court ordered the Corps to rescind the part of its regulation "which limits the permit (§ 404) jurisdiction of the Corps by definition or otherwise to other than the waters of the United States." The court also ordered the Corps to expeditiously propose regulations which reflected the broad mandate to protect all waters of the United States, as provided by Congress in 1972. *NRDC v. Callaway*, 392 F.Supp 685 (D.D.C. 1975).

Pursuant to the court's order in *Callaway*, the Corps proposed four alternative definitions of "navigable waters" under the 404 program in May 1975, and issued an "interim final regulation" with an expanded definition of "navigable waters" in July 1975.

The interim final regulation defined the term 'navigable waters' to include: coastal waters, wetlands, mudflats, swamps, and similar areas, freshwater lakes, rivers, and streams that are used, were used in the past, or are susceptible to use to transport interstate commerce, including all tributaries to these waters; interstate waters, certain specified intrastate waters, the pollution of which would affect interstate commerce; and freshwater wetlands including marshes, shallows, swamps, and similar areas that are contiguous or adjacent to the above described lakes, rivers, and streams, and that are periodically inundated and normally characterized by the prevalence of vegetation that requires saturated soil conditions for growth and reproduction.

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[25] The Corps did not alter its regulatory nomenclature to define the term "waters of the United States" until its final rule in July, 1977. See 42 FR 37127.

[26] "The term 'navigable waters of the United States' and 'navigable waters,' as used herein mean those waters of the United States which are subject to the ebb and flow of the tide, and/or are presently or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce (See 33 C.F.R. § 209.260 for a more complete definition of these terms)."

[27] Letter from Russell E. Train to General William G. Gribble, Chief, Army Corps of Engineers. June 19, 1974.

The July 1975 rule adopted a plan to regulate these categories of waters in three phases. "Phase one began immediately upon publication of the regulation and included all waters subject to the ebb and flow of the tide and/or waters that are, were, or are susceptible to use for commercial navigation purposes (waters already being regulated by the Corps) plus all adjacent wetlands to these waters.... Phase II became effective on September 1, 1976 (originally scheduled for July 1, 1976, but postponed for 60 days by Presidential action), and included primary tributaries to the Phase I waters and lakes greater than five acres in surface area, plus wetlands adjacent to these waters. Phase III, requiring permits for discharges of dredged or fill material into all waters of the United States, became effective on July 1, 1977."[28]

The 1977 final regulations consolidated the nine categories of waters comprising the "navigable waters" in the 1975 rule down to four categories:

Category 1 – Coastal and inland waters, lakes, rivers and streams that are navigable waters of the United States, including adjacent wetlands.

Category 2 – Tributaries to navigable waters of the U.S., including adjacent wetlands.

Category 3 – Interstate waters and their tributaries, including adjacent wetlands.

Category 4 – All other waters of the United States not identified in Categories 1-3, such as isolated lakes and wetlands, intermittent streams, prairie potholes, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, the degradation or destruction of which could affect interstate commerce.

The Corps stated in the preamble to the 1977 final rule:

> "Waters that fall within categories 1, 2, and 3 are obvious candidates for inclusion as waters to be protected under the Federal government's broad powers to regulate interstate commerce. Other waters are also used in a manner that makes them part of a chain or connection to the production, movement, and/or use of interstate commerce even though they are not interstate waters or part of a tributary system to navigable waters of the United States. The condition or quality of water in these other bodies of water will have an effect on interstate commerce.
>
> The 1975 definition identified certain of these waters. These included waters used:
> - By interstate travelers for water-related recreational purposes;
> - For the removal of fish that are sold in interstate commerce;
> - For industrial purposes by industries in interstate commerce; and
> - In the production of agricultural commodities sold or transported in interstate commerce.

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[28] *Quoting* the July 19, 1977 preamble's historical background discussion at 42 FR 37124.

> We recognized, however, that this list was not all inclusive, as some waters may be involved as links to interstate commerce in a manner that is not readily established by the listing of a broad category. The 1975 regulation, therefore, gave the District Engineer authority to assert jurisdiction over 'other waters' such as intermittent rivers, streams, tributaries and perched wetlands, to protect water quality. Implicit in this assertion of jurisdiction over these other waters was the requirement that some connection to interstate commerce be established, even though that requirement was not clearly expressed in the 1975 definition.[29]

Thus, the basic approach to defining waters of the United States broadly, as envisioned by Congress in 1972, was adopted into regulations by mid-1975 and received additional clarification and refinement by mid-1977. As we discuss below, the legislative history makes clear that Congress was well aware of the *Callaway* case and the Corps' efforts to adopt a rule defining "waters of the United States." Indeed, the litigation and subsequent rulemaking provide the critical context for understanding the importance and centrality of the congressional debate over the proper scope of the 404 program during the 1977 amendments to the Clean Water Act.

3. The 1977 Amendments

The period during which Congress considered and debated amendments to the Clean Water Act in 1976 and 1977 closely followed the period when the scope and contour of the Corps' regulations for implementing the 404 program were litigated and revised. During the 1977 reauthorization process, the regulatory battle over the Corps' rules was mirrored by two competing approaches to amending the 404 program that were considered by the Congress.

The first approach was that taken in the bill reported out of the Senate Environment and Public Works Committee, which sought to address concerns about the implementation of the 404 program by refining and clarifying several elements of the program. The key amendments adopted by the committee included: authorizing the Corps to establish a general permit program for categories of activities involving discharges that would have minimal adverse impact on the environment (individually and cumulatively) (404(e)); clarifying a set of activities whose discharges were exempt from 404 permit requirements including "normal farming, silviculture, and ranching activities such as plowing, seeding, cultivating" and other activities (404(f)); creating a provision for delegation of administration of the 404 program, for those waters that were not "traditionally navigable," to states with adequate programs(404(g)).

During the Senate's floor debate on the 1977 amendments, Senator Bentsen offered an amendment to the Environment and Public Works Committee's bill that would have amended the Act to limit the scope of § 404 to only traditionally navigable waters and their adjacent wetlands (essentially those waters that the Corps initially intended to regulate prior to the *Callaway* decision).

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[29] Quoting 42 FR 37127-37128, (July 19, 1977)

The Congressional Record contains a long debate held before the full Senate voted whether to accept or reject the Bentsen plan to narrow the scope of the Clean Water Act protections for wetlands and other waters from discharges of dredge and fill material. It is clear from the debate that both sides agreed that the scope of the Act since 1972 had reached all waters of the United States, and that the Environment and Public Works Committee's approach would not reduce the scope of protection for all waters of the United States.

As Senator Bentsen himself stated: "The committee has failed to recommend any reduction in the scope of the § 404 permit program....The program would still cover all waters of the United States, including small streams, ponds, isolated marshes, and intermittently flowing gullies. (Congressional Record, August 4, 1977, page 26711) (emphasis added).

Senator John Tower of Texas, a supporter of the Bentsen amendment, referred to the *Callaway* case and the Corps' subsequent regulations when he stated: "A court decision, coupled with an administrative decision, is causing us to be faced with a regulatory scheme which covers not just the rivers of the Nation but all surface waters and wetlands of the United States." (Congressional Record, August 4, 1977, pp. 26721-26722) (emphasis added).

Opponents of Senator Bentsen's amendment readily acknowledged that the EPW Committee's bill maintained the broad jurisdiction enacted in 1972, and argued why Senator Bentsen's amendment to reduce jurisdiction of the Act should be rejected.

Senator Gary Hart of Colorado spoke at length on the shortcomings of the approach advocated by Senator Bentsen:

> The Senator from Texas has a very appealing approach because it is very simple; but, like most simple approaches to difficult problems, it is wrong, and it seeks to limit the treatment available by saying we can only control pollutants if they occur at a certain place, and not another place, even though all those places are interrelated from an ecological and environmental point of view. The difficulty with the Bentsen amendment is that it takes a meat ax approach; and, like most other amendments that take a meat ax approach, it destroys more than it corrects....
>
> There is a Federal and national interest in the waterways of this country. There is a national and Federal interest in waterways other than those on which a ship can be floated. That is essentially the issue here today....
>
> The Congress can capitulate. The Congress can abandon the national interest. The Congress can permit activities of a dredge-and-fill nature to go forward on those small streams, marshes, wetlands, and swamps which will make their way into the bigger waterways of this country and have a tremendous adverse effect on the people of this country and on their welfare, on their crops, on many of their activities. Or we can establish a program of the sort the committee has established, which will protect all of those water systems; which will protect all of the elements of those systems, which will

> not permit dredge and fill activities to deposit very toxic materials into those waterways." (Congressional Record, August 4, 1977, page 26713) (emphasis added).

Senator Robert Stafford of Vermont explained how the EPW committee sought to remedy concerns about the 404 program without reducing the broad jurisdiction established in 1972:

> The 1972 Federal Water Pollution Control Act exercised comprehensive jurisdiction over the Nation's waters to control pollution. This decision was the result of extensive and careful study and debate. In its report on that legislation, the Senate Public Works committee stated 'waters move in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.'...After extensive deliberation, the committee amendment rejects the redefinition of navigable waters. Instead, the committee amendment insures continued protection of the Nation's waters, but allows States to assume the primary responsibility for protecting those lakes, rivers, streams, swamps, marshes and similar areas that lie outside the Corps program in the so-called 'Phase I waters.'" (Congressional Record, August 4, 1977, page 26714) (emphasis added).

Senator Chafee spoke passionately about the value of wetlands for the whole country and why Senator Bentsen's proposal for eliminating broad federal protection for intrastate waters should be rejected:

> I think it is important to bear in mind that marshes and wetlands are not a parochial responsibility or an asset; they are not a local asset; they are a national asset. They are not just confined within boundaries which happen to exist for any one of our States. The wetlands perform a vital part of the food chain for our wildlife. ... I should like to stress that these wetlands are not something that belong to Louisiana or Rhode Island or Michigan or Minnesota. They belong to all the citizens. They are much too valuable to be abandoned to some unstable, fragmentary kind of protection. We must bear in mind that these wetlands are part of this larger system. They are not independent. They do not belong only to Minnesota, so that if Minnesota wants to fill them in, it is too bad for the Nation. We have to remember that it affects everything else downstream. There is a linkage between wetlands and streams and estuaries and rivers, and they all must live in harmony, through wise management." (Congressional Record, August 4, 1977, pp. 26716-26717) (emphasis added).

Senator Howard Baker argued that both the EPW committee and courts recognized and were effectuating the common scientific understanding of hydrological linkage between all types of waters:

> The statutory language authorizing the 404 program requires the cooperation of the Corps and EPA to insure that discharges of dredged material and fill material will not have unacceptable adverse effects on municipal water supplies, shellfish beds, fisheries, wildlife, and recreation. A fundamental element of the Water Act is broad jurisdiction over water for pollution control purposes... Comprehensive jurisdiction is necessary not only to protect the natural environment but also to avoid creating unfair competition.

> Unless Federal jurisdiction is uniformly implemented for all waters, dischargers located on nonnavigable tributaries upstream from the larger rivers and estuaries would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors. Thus, artificially limiting the jurisdiction can create a considerable competitive disadvantage for certain discharges.....It is important to understand that toxic substances threaten the aquatic environment when discharged into small streams or into major waterways. Similarly, pollutants are available to degrade water and attendant biota when discharged in marshes and swamps, both below and above the mean and ordinary high water marks....Continuation of the comprehensive coverage of this program is essential for the protection for the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource." (Congressional Record, August 4, 1977, page 26718)(emphasis added).

Senator Bentsen's amendment was defeated by a vote of the full Senate. Although the House had passed legislation amending the Act along the lines of the Bentsen amendment, when the House and Senate met in conference, the Senate approach was accepted and no reduction in the scope of the Act's jurisdiction was enacted.

Thus, the idea of reducing the scope of the Clean Water Act's jurisdiction, which EPA and the Corps are contemplating, and numerous industry groups are promoting, was already rejected by Congress more than twenty-five years ago.

III. THE FACTORS LISTED IN 33 C.F.R. 328.3(a)(3)(i)-(iii) MUST BE RETAINED AS BASES FOR CLEAN WATER ACT JURISDICTION

The ANPRM requests comments as to whether, and if so, under what circumstances, the factors listed in 33 C.F.R. 328.3(a)(3)(i)-(iii) ("the (a)(3) factors") or any other factors provide a basis for determining Clean Water Act jurisdiction over what the ANPRM describes as "isolated, intrastate, non-navigable waters." 68 Fed. Reg. at 1994.

The language, purpose, and legislative history of the Clean Water Act make it clear that waters meeting the tests described in the (a)(3) factors are covered by the statute. As is discussed in detail above, the Supreme Court's decision in *SWANCC* does not support any change to these factors or to any other element of the existing regulatory definition of "waters of the United States."

As a result, any attempt to limit or remove Clean Water Act jurisdiction from waters meeting the tests described by the (a)(3) factors – including from the waters that the ANPRM refers to as "isolated" – would not withstand judicial scrutiny. These and other factors identified in the existing Clean Water Act regulations as providing a basis for establishing jurisdiction must remain in place.[30]

A. THE CLEAN WATER ACT AND SOUND NATIONAL POLICY REQUIRE THE RETENTION OF THE JURISDICTIONAL TESTS SET FORTH IN THE (A)(3) FACTORS

The purpose and clear language of the Clean Water Act demonstrate that the Act is to be applied to all waters that support recreation, fishing, shellfishing, and commercial uses – the precise uses described by the (a)(3) factors. Protecting waters that the ANPRM describes as "isolated, intrastate, non-navigable" that meet the tests of the (a)(3) factors is essential to achieve the goals of the Clean Water Act and is sound national policy.

1. Retention of the Jurisdictional Tests Set Forth in the (a)(3) Factors is Mandated by the Purpose and Clear Language of the Clean Water Act

Both the purpose and language of the Clean Water Act make clear that Congress intended that protections be developed and provided to all waters protected by the current regulations, including specifically those used for fishing, shellfishing, recreation, and commercial uses.

The purpose – and explicit intent – of the Clean Water Act is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To help achieve this purpose, the Clean Water Act further establishes an interim goal aimed directly at waters used for the purposes described in the (a)(3) factors: "it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983." *Id.*

The purpose, interim goal, and structure of the Act make it clear that Congress was establishing a comprehensive regulatory scheme that was designed to protect and preserve aquatic ecosystems and their values, including providing habitat for fish, shellfish, and support for recreation.

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[30] It is important to note that the factors enumerated in this Question 1 – the use of waters by interstate or foreign travelers for recreational or other purposes, the presence of fish or shellfish that could be taken and sold in interstate commerce, and the use of waters for industrial purposes by industries in interstate commerce – are illustrative only. The long standing regulations being questioned by the ANPRM state clearly that intrastate, nonnavigable waters are protected if "the use, degradation or destruction of [the water] could affect interstate or foreign commerce including any such waters" used for recreation, fish or shellfish, or industry, as described. 33 C.F.R. § 328(a)(3) (emphasis added); see also 40 C.F.R..230.3(s)(3) and substantively similar regulatory definitions at 40 C.F.R. §§ 110.1, 112.2, 116.3, 117.1, 122.2, 232.2, 300.5, Part 300, 302.3 and 401.11. That is, the three specific factors listed in the regulations are illustrative, not exhaustive as implied by the form of this first Question posed by the ANPRM.

The Clean Water Act contains numerous additional directives focused on protecting and restoring waters used for recreation, fishing, shellfishing, and commercial use. For example:

a. Section 102 directs the Administrator of EPA to prepare or develop comprehensive programs for preventing, reducing, or eliminating pollution that give "due regard" to the "improvements which are necessary to conserve such waters for the protection and propagation of fish and aquatic life and wildlife, recreational purposes, and the withdrawal of such waters for public water supply, agricultural, industrial, and other purposes." 33 U.S.C. § 1252.

b. Section 104 directs the Administrator to "conduct and promote, and encourage contributions to, continuing comprehensive studies of the effects of pollution, including sedimentation, in the estuaries and estuarine zones of the United States on fish and wildlife, on sport and commercial fishing, on recreation, on water supply and water power, and on other beneficial uses." 33 U.S.C. § 1254(n)(1). Section 104 also authorizes the Administrator to make grants to "conduct basic research into the structure and function of fresh water aquatic ecosystems, and to improve understanding of the ecological characteristics necessary to the maintenance of the chemical, physical, and biological integrity of freshwater aquatic ecosystems." 33 U.S.C. § 1254).

c. Section 119 directs the Administrator (through delegation) to conduct or commission studies necessary for strengthening the implementation of a comprehensive management plan for the Long Island Sound including "water quality requirements to sustain fish, shellfish, and wildlife populations, and the use of indicator species to assess environmental quality." 33 U.S.C. § 1269(c)(2)(G).

d. Section 120 directs the development of a pollution prevention, control and restoration plan for Lake Champlain that identifies "corrective actions and compliance schedules addressing point and nonpoint sources of pollution necessary to restore and maintain the chemical, physical, and biological integrity of water quality, a balanced indigenous population of shellfish, fish and wildlife, recreational, and economic activities in and on the lake." 33 U.S.C. § 1270(e)(2)(A).

e. Section 303 directs the Administrator to ensure the promulgation of State water quality standards applicable to interstate and intrastate waters. "Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes . . . ." 33 U.S.C. §§ 1313(a) and (c).

f. Section 303 further directs the Administrator to ensure the promulgation of Total Maximum Daily Loads and Total Maximum Daily Thermal Loads for all waters for which other Clean Water Act controls are "not stringent enough to implement any water quality standard applicable to such waters." 33 U.S.C. § 1313(d). Total Maximum Daily Thermal Loads are specifically required to be developed for waters where "controls on thermal dischargers under section 1311 of this title are not stringent enough to assure protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife." Id. Such Total Maximum Daily Thermal Loads are to be established at levels that will "assure protection and propagation of a balanced, indigenous population of shellfish, fish and wildlife." Id.

g. Section 304 directs the Administrator to develop, publish, and update "criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants . . . ." 33 U.S.C. § 1314(a). This section also directs the Administrator to develop, publish, and update information on "the factors necessary for the protection and propagation of shellfish, fish, and wildlife for classes and categories of receiving waters and to allow recreational activities in and on the water." Id. Section 304 further directs the Administrator, to "develop and publish information on the factors necessary for the protection of public water supplies, and the protection and propagation of a balanced indigenous population of shellfish, fish and wildlife, and to allow recreational activities, in and on the water." *Id.* at § 1314 (5)(B); see also § 1314(5)(A) (requiring publication of the same factors but excluding the word "indigenous" in connection with shellfish).

h. Section 304 also requires the Administrator to ensure promulgation of a list of waters within the State which, after application of required effluent limitations, "cannot reasonably be anticipated to attain or maintain . . . that water quality which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water." 33 U.S.C. § 1314(l)(A).

i. Section 316 authorizes the Administrator to impose effluent limitations for thermal discharges "that will assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife in and on that body of water." 33 U.S.C. § 1326(a).

j. Section 402 establishes the National Pollutant Discharge Elimination System, a permit program applicable to point source discharges into the Nation's waters that is specifically designed to reduce the amount of pollution entering the Nation's waters from, among other things, industrial and commercial enterprises. 33 U.S.C. § 1342. Discharges of pollutants into surface waters are caused primarily by industrial and commercial operations, including manufacturing, construction, resource extraction, land development, agriculture, and waste disposal. See, e.g., 40 C.F.R. Parts 403-610 (EPA effluent guidelines for 73 categories of industrial activities, filling over 1500 pages of the Code of Federal Regulations).

k. Section 404 directs EPA to establish guidelines for the disposal of dredged and fill material that "shall be based upon criteria comparable to the criteria" used in § 403(c). 33 U.S.C. § 1344(b) (emphasis added). The means that the § 403 marine-related criteria quoted below were to be adapted for waters – including intrastate, nonnavigable waters – that could be impacted by the issuance of § 404 permits. The § 403 criteria require the Administrator to promulgate guidelines for determining degradation to marine waters that "shall include", inter alia:

> (A) the effect of disposal of pollutants on human health or welfare, including but not limited to plankton, fish, shellfish, wildlife, shorelines, and beaches;
>
> (B) the effect of disposal of pollutants on marine life including the transfer, concentration, and dispersal of pollutants or their byproducts through biological, physical, and chemical processes; changes in marine ecosystem diversity, productivity, and stability; and species and community population changes;
>
> (c) the effect of disposal, of pollutants on esthetic, recreation, and economic values;

* * *

> (G) the effect on alternative uses of the oceans, such as mineral exploitation and scientific study.

33 U.S.C. § 1343(c).

l. Section 404(c) authorizes the Administrator to prohibit specification of a disposal site whenever the Administrator determines that "the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas." 33 U.S.C. § 1344(c).

In 1987, Congress further demonstrated its intent to cover waters identified by the (a)(3) factors when it directed the Administrator to "conduct research on the harmful effects on the health and welfare of persons caused by pollutants in water" which research "shall include, and shall place special emphasis on, the effect that bioaccumulation of these pollutants in aquatic species has upon reducing the value of aquatic commercial and sport industries." 33 U.S.C. § 1254a.

Congress also demonstrated its concerns with the effects of water pollution on fish and other aquatic life, recreational uses, drinking water, public health, agricultural and industrial uses in almost 25 years worth of predecessor legislation to the Clean Water Act. E.g., 1948 Federal Water Pollution Control Act, Pub..L. No. 80-845, 62 Stat. 1155, Chapter 758, June 30, 1948 (authorizing development of federal plans for eliminating or reducing pollution giving due regard to improvements necessary to conserve waters needed for public water supplies, fish and aquatic life propagation, recreational purposes, agricultural purposes, and industrial purposes); Clean Water Authority Act of 1966, Pub..L. No. 89-753, 62 Stat. 1155 (1966) (authorizing procedures for abating domestic pollution that damages the health or welfare of citizens in foreign countries); Water Quality Improvement Act of 1970, Pub..L. No. 91-224, Part 1 (1970) (authorizing the President to determine the quantities of oil which would be harmful to the public health or welfare of the United States including, but not limited to, fish, shellfish, and wildlife, public and private property, shorelines and beaches).

2. Retention of the Jurisdictional Tests Set Forth in the (a)(3) Factors is Necessary to Achieve the Goals of the Clean Water Act

The Clean Water Act creates a comprehensive regulatory scheme to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). That scheme includes an explicit goal of attaining a level of water quality that "provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a)(2).

Activities that degrade or destroy waters identified by the (a)(3) factors prevent the attainment of these goals for both the specific waters being harmed, and for the Nation's waters as a whole. As is discussed in detail below, the hydrological, chemical, and biological interconnectedness of the Nation's waters makes it clear that the Act's goals cannot be met without protecting all of the waters covered by the current regulations. These goals certainly cannot be met without protecting the intrastate waters identified by the (a)(3) factors. As a result, the jurisdictional tests set forth in the (a)(3) factors must be retained.

3. Retention of the Jurisdictional Tests Set Forth in the (a)(3) Factors is Mandated by the Clean Water Act's Assertion of Commerce Clause Jurisdiction Over the Nation's Waters

On their face, the (a)(3) factors are limited to providing a basis for jurisdiction only where waters are used for purposes that could affect interstate commerce. As discussed in detail below, the activities described in the (a)(3) factors fall squarely within the scope of the Commerce Clause and do not in any way push the limits of congressional authority or power to regulate. Those activities are well recognized to have, and in fact have, a significant affect on interstate commerce. Because the Clean Water Act has repeatedly been found to assert Commerce Clause jurisdiction over the Nation's waters, the (a)(3) factors must be retained as a basis for determining jurisdiction, including over those waters described by the ANPRM as "isolated, intrastate, non-navigable."

Courts have consistently held that through the Act, Congress asserted federal jurisdiction over the Nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution. E.g., United States v. Edison, 108 F.3d 1336, 1341-42 (11th Cir. 1997); Quivira Mining Co. v. EPA, 765 F.2d 126, 129-30 (10th Cir 1985); United States v. Lambert, 695 F.2d 536, 538 (11th Cir. 1983); United States v. Texas Pipe Line Co., 611 F.2d 345, 347 (10th Cir. 1979); United States v. Earth Sciences, Inc., 599 F.2d 368 (10th Cir. 1979); Leslie Salt Co. v. Froehlke, 578 F.2d 742, 744-45 (9th Cir. 1978); United States v. Ashland Oil and Transp. Co., 504 F.2d 1317, 1325 (6th Cir. 1974); Natural Resources Defense Council v. Callaway, 392 F. Supp. 685, 685 (D.D.C. 1975); see also United States v. Riverside Bayview Homes Inc, 474 U.S. 121, 133 (1985) ("The Act's definition of "navigable waters" as "the waters of the United States" makes it clear that the term "navigable" as used in the Act is of limited import. In adopting this definition of "navigable waters," Congress evidently intended to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed "navigable" under the classical understanding of that term.")

These decisions are based, in part, on the legislative history of the Clean Water Act, which makes it clear that Congress intended that Clean Water Act jurisdiction be asserted to the maximum extent permitted under the Commerce Clause. That legislative history explicitly states that the definition of navigable waters is intended to "be given the broadest possible constitutional interpretation." S. Rep. No.1236, 96th Cong., 2d Sess., 144 (1972), *reprinted in* 1 Leg. Hist. 327. The legislative history of the Act is discussed in detail above.

The *SWANCC* Court's brief footnote suggesting the possibility of a less expansive reading of the Clean Water Act's legislative history is mere dictum, and does not alter the Act's reach. See *SWANCC*, 531 U.S. at 168 n.3. *SWANCC* is based on the Court's decision that the plain language of Clean Water Act § 404(a) was unambiguous as applied to "petitioner's balefill site pursuant to the 'Migratory Bird Rule.'" *SWANCC*, 531 U.S. at 172, 174. It is well settled that where a court finds that the statutory language is clear, the court's inquiry is at an end, and legislative history will not be considered. E.g., Toibb v. Radloff, 501 U.S. 157, 162 (1991). As a result, the *SWANCC* Court's statement in footnote 3 concerning the Act's legislative history is neither essential nor germane to the disposition of any issues in *SWANCC*. Consequently, that statement is dictum, and is not binding. E.g., Toibb, 501 U.S. at 162; Central Green Co. v. United States, 531 U.S. 425, 431 (2001); Tyler v. Cain, 533 U.S. 656, 663 n.4 (2001). That statement also cannot form the basis of a lower court decision, as constitutional issues cannot be defined by "inferences from opinions which did not address the question at issue." Texas v. Cobb, 532 U.S. 162, 169 (2001). It would be equally improper for EPA and the Corps to revise the long standing rules setting forth the (a)(3) factors – rules upheld on numerous occasions – based on any perceived inferences regarding the *SWANCC* dictum.

4. Retention of the Jurisdictional Tests Set Forth in the (a)(3) Factors is Sound National Policy

Protecting all waters covered by the current regulations, including the waters described by the (a)(3) factors, through the Clean Water Act is sound National policy.

It is well documented that healthy waters are vital for the health, safety, and welfare of the American people. Healthy waters also are essential to the Nation's economic well-being. Indeed, as EPA reported in May 2000, "the U.S. economy depends on clean water." U.S. Environmental Protection Agency, *Liquid Assets 2000: America's Water Resources at a Turning Point*, EPA-840-B-00-01 (May 2000) ("Liquid Assets") at 2.

Waters that contribute to health, safety, welfare, and a vital National economy are not limited to those that either cross state borders, are traditionally navigable, or are adjacent to traditionally navigable waters. To the contrary, intrastate, non-navigable waters identified by the (a)(3) factors directly and substantially contribute to the Nation's welfare and economic vitality both in their own right and as contributors to the ecological health of all our Nation's waters.

As discussed in detail below, the Nation's waters are hydrologically, chemically, and biologically connected. As a result, failing to protect some of the Nation's waters has an adverse impact on the ecological health of the rest of the Nation's waters. Thus, all waters covered by the current regulations must be protected to achieve the Clean Water Act's goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters.

The economic, health, safety, welfare, esthetic, and recreational services provided by the Nation's waters, including intrastate waters protected by the current regulations, include (but are by no means limited to) the following:

> a. Waters of the United States support and are used for numerous activities that affect the Nation's economic well-being, including: (1) as sites for transportation and infrastructure development; and for residential, commercial, and municipal construction and site development; (2) industrial production and the discharge of pollutants for industrial production; (3) agricultural production and irrigation; (4) silviculture; (5) municipal uses; (6) resource extraction; (7) energy production; and (8) fishing and shellfishing.
>
> b. Waters of the United States provide critical habitat for fish, birds, waterfowl, and other wildlife, and support at least the following recreational activities that are enjoyed by millions of people in the United States: (1) fishing; (2) waterfowl hunting; (3) hunting and trapping; (4) bird watching; (5) boating, canoeing, rafting, and kayaking; (6) hiking; and (7) photography and other graphic arts. These activities, along with associated travel, generate billions of dollars of income each year for the travel, tourism, recreation, and sporting sectors of the economy of the United States.
>
> c. Waters of the United States support and provide safe and adequate drinking water supplies. Small streams, wetlands and other waters filter water and recharge surface and subsurface drinking water supplies, and filter and remove pollutants from surface run-off before that water is released to groundwater or surface waters or is taken up by plants and animals and widely dispersed throughout the food chain. Millions of people in the United States depend on intrastate waters for these services.
>
> d. Clean, safe, and ample water supplies promote economic growth and human health. A 2000 *Money* magazine survey found that clean water and clean air are two of the most important factors Americans consider in choosing a place to live. *Liquid Assets* at 2, 16.
>
> e. Degradation of waters of the United States can contaminate drinking water sources, and waters used for recreation. Such contamination increases both risks to human health and health care costs. Contaminated rivers and closed beaches also cause lost revenue for local businesses that serve tourists, anglers, and recreationists. For

example, EPA reports that "at least a half-million cases of illness annually can be attributed to microbial contamination in drinking water," and that in 1998, "2,506 fish consumption advisories or bans were issued in areas where fish were too contaminated to eat." *Liquid Assets* at 2.

f. Degradation of waters of the United States can increase the risk of floods, threatening lives, homes, and businesses, and increasing flood damages and emergency response costs.

g. Degradation of waters of the United States can decrease the ability of waters to collect, store, and filter surface water run-off. Among other damages, this can significantly increase the amount of sediment entering navigation channels, causing increased costs to federal taxpayers and the navigation industry to maintain navigation.

B. THE JURISDICTIONAL TESTS DESCRIBED BY THE (A)(3) FACTORS MUST BE RETAINED BECAUSE THEY ARE CLEARLY AUTHORIZED BY THE COMMERCE CLAUSE

For at least the reasons discussed above, the (a)(3) factors must be retained as a basis for determining jurisdiction over waters, including those described by the ANPRM as "isolated, intrastate, non-navigable." Retention of these factors is authorized by the broad jurisdictional reach of the Commerce Clause of the U.S. Constitution, which clearly covers the activities set forth in the (a)(3) factors.

Waters identified by the (a)(3) factors are clearly covered by the Commerce Clause because the factors are limited on their face to providing a basis for jurisdiction only where waters are used for purposes that could affect interstate commerce; the activities described in the (a)(3) factors undeniably do have a significant affect on interstate commerce; and applying the Clean Water Act to waters identified by the (a)(3) factors – including to those referred to by the ANPRM as "isolated" – is necessary to effectuate the Clean Water Act's comprehensive regulatory scheme.

1. The Commerce Clause Grants Power to Regulate Economic Activities that Pollute or Otherwise Harm the Nation's Waters, Including Those Described by the (a)(3) Factors

Article I, § 8 of the Constitution grants the federal government power to "regulate Commerce . . . among the several States." The regulatory power granted by the Commerce Clause is "plenary" and as such is "'complete in itself, may be exercised to its utmost extent, and acknowledges no limitations, other than are prescribed in the constitution.'" Hodel v. Virginia Surface Mining Reclamation Ass'n, 452 U.S. 264, 276 (1981) (*Quoting* Gibbons v. Ogden, 22 U.S. (9 Wheat.) 1, 196 (1824)).

The U.S. Supreme Court has made clear that the Commerce Clause empowers Congress to regulate "activities causing air or water pollution, or other environmental hazards that may have effects in more than one State." Hodel, 452 U.S. at 282. As Justice Stevens noted in his dissent to *SWANCC*, the Clean Water Act "is a paradigm of environmental regulation" that is "an accepted exercise of federal power." 531 U.S. at 191 (citing Hodel, 452 U.S. at 282).

Pursuant to the Commerce Clause, Congress may regulate (1) channels of interstate commerce; (2) instrumentalities of interstate commerce, or persons or things in interstate commerce; and (3) activities that "substantially affect" interstate commerce. United States v. Lopez, 514 U.S. 549, 558-59 (1995); see *SWANCC*, 514 U.S. at 174. The term "commerce" has long been broadly construed to encompass "every species of commercial intercourse" that "concerns more States than one." Gibbons, 22 U.S. (9 Wheat.) at 193.

Activities can "substantially affect" interstate commerce even if those activities are conducted wholly within one state. The Supreme Court has ruled repeatedly that even "'activity that is purely intrastate in character may be regulated by Congress, where the activity, combined with like conduct by others similarly situated, affects commerce among the States or with foreign nations.'" Hodel, 452 U.S. at 277 (*Quoting* Fry v. Untied States, 421 U.S. 542, 547 (1975)).

Since 1937, the U.S. Supreme Court has upheld congressional regulation of a broad variety of economic activities that are themselves conducted wholly within one state, but that in the aggregate have a substantial affect on interstate commerce. E.g., NLRB v. Jones & Laughlin Steel Corp., 301 U.S. 1 (1937) (management of a steel plant); Wickard v. Filburn, 317 U.S. 111 (1942) (cultivation of wheat for personal consumption); Katzenbach v. McClung, 379 U.S. 294 (1964) (operation of a small family restaurant); Perez v. United States, 402 U.S. 146 (1971) (participation in extortionate credit transactions); and Hodel, 452 U.S. 264 (coal mining).

Importantly, activities may be regulated under the Commerce Clause even where they may have little or no affect on interstate commerce when considered in isolation. As the Supreme Court recently affirmed, "where a general regulatory statute bears a substantial relation to commerce, the de minimis character of individual instances arising under that statute is of no consequence." United States v. Lopez, 514 U.S. 549, 558 (1995) (citation omitted); see also United States v. Morrison, 529 U.S. 598, 609 (2000) (confirming the Commerce Clause analysis framework described in Lopez); Hodel, 452 U.S. at 277 (permitting regulation of activity which "combined with like conduct by others similarly situated, affects commerce among the several States") (citation omitted); Wickard, 317 U.S. at 127-28 (regulating personal growth and consumption of wheat). Thus, where a specific activity is one of a class of activities properly regulated under the Commerce Clause, the courts will not exclude the specific activity from regulation because its individual impact is "trivial". Perez v. United States, 402 U.S. 146, 154 (1971); Maryland v. Wirtz, 392 U.S. 183, 192 (1968); U.S. v. Pozsgai, 999 F.2d 719, 734 (3rd Cir. 1993).

Where economic activities are regulated, it is clear that their impacts may be aggregated to determine whether there is a substantial affect on interstate commerce. United States v. Morrison, 529 U.S. at 610. The Clean Water Act regulates activities that are obviously and overwhelmingly economic in nature, and these activities both standing on their own and when aggregated, clearly have a substantial affect on interstate commerce.

Discharges of pollutants into surface waters are caused primarily by industrial and commercial operations, including manufacturing, construction, resource extraction, land development, agriculture, and waste disposal. See, e.g., 40 C.F.R. Parts 403-610 (EPA effluent guidelines for 73 categories of industrial activities, filling over 1500 pages of the Code of Federal Regulations). Discharges of dredge or fill material under § 404 of the Clean Water Act also are overwhelmingly economic in nature, as illustrated by Federal cases involving § 404 permits issued by the Corps. E.g., Riverside Bayview Homes, 474 U.S. at 124 (addressing permit to fill 80 acres of wetlands to prepare for construction of a housing development); Wetlands Action Network v. U.S. Army Corps of Engineers, 222 F.3d 1105, 1110 (9th Cir. 2000), cert. denied, 534 U.S. 815 (2001) (addressing permit to develop 1,000 acres that would include residential areas, a marina, hotels, and retail establishments); United States v. Deaton, 209 F.3d 331, 333 (4th Cir. 2000) (addressing permit to develop a residential subdivision); see also V. Albrecht & B. Goode, Wetland Regulation in the Real World (1994) (demonstrating, based on a sampling of § 404 permit applications in 1992, that the overwhelming majority of acreage for which § 404 permits are sought is intended for commercial, industrial, or other economic use).

The fact that it may be possible to identify potential instances where the discharge of pollutants or the discharge of dredge and fill material may be done for non-economic reasons has no impact on the proper jurisdictional reach of the Clean Water Act under the Commerce Clause. As discussed above, it is well settled that "where the class of activities is regulated and that class is within the reach of federal power, the courts have no power to excise as trivial, individual instances of the class." Perez v. United States, 402 U.S. 146, 154 (1971) (internal quotation marks omitted).

The Supreme Court's decision in *SWANCC* did not alter any of these long standing Commerce Clause principles. In *SWANCC*, the Supreme Court expressly declined to address the reach of Commerce Clause jurisdiction. See 531 U.S. at 174; Rancho Viejo, LLC v. Norton, __ F.3d. __, 2003 WL 1699326 (D.C. Cir. 2003) (observing that in *SWANCC*, the Supreme Court "expressly declined to reach" the Commerce Clause question).

2. Regulation of Waters Identified in 33 C.F.R. 328.3(a)(3)(i)-(iii) is Clearly Authorized by the Commerce Clause as Such Regulation is Necessary to Effectuate the Clean Water Act's Comprehensive Regulatory Scheme

As discussed above, the Clean Water Act establishes a comprehensive regulatory scheme designed to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Also as discussed throughout this section, that scheme clearly has a very substantial impact on interstate commerce.

Under such circumstances, "Congress has the authority under the Constitution, through the intersection of the *Commerce Clause* and the *Necessary and Proper Clause*, to regulate an intrastate activity that it could not reach standing alone, if the regulation is essential or integral to the maintenance of a larger regulatory scheme properly governing interstate commerce." GDF Realty Investments, Ltd. v. Norton, __F.3d__, 2003 U.S. App. LEXIS 5818 *57 (5th Cir. Mar. 26, 2003) (Denis, concurring op.). See, e.g., United States v. Lopez, 514 U.S. 549, 561 (1995) (finding that regulation at issue was "not an essential part of a larger regulation of economic activity, in which the regulatory scheme could be undercut unless the intrastate activity were regulated"); Hodel v. Indiana, 452 U.S. 314, 329 n.17 (finding that a complex regulatory scheme "can survive a Commerce Clause challenge without showing that every single facet of the program is independently and directly related to a valid congressional goal. It is enough that the challenged provisions are an integral part of the regulatory program and that when considered as a whole satisfies [the substantial effect] test."); Maryland v. Wirtz, 392 U.S. 183, 192-93 (1968) (refusing to excise as trivial individual instances of regulation because the effect of such an excision would be to undermine the effectiveness of the regulatory program); United States v. Wrightwood Dairy Co., 315 U.S. 110, 121 (1942) (stating that Congress has the power to enact such regulations of intrastate activity as are "necessary and appropriate" to make the regulation of interstate commerce effective).

As discussed in detail below, the chemical, physical, and biological integrity of the Nation's waters cannot be restored and maintained without Clean Water Act regulation of all waters protected by the current regulations – including those identified by the (a)(3) factors. Because regulation of such waters is essential to the efficacy of (i.e., is necessary and proper to) the Clean Water Act's comprehensive scheme, Congress can regulate any waters meeting the tests described in the (a)(3) factors, including those identified by the ANPRM as "isolated, intrastate, non-navigable waters." 68 Fed. Reg. at 1994.

As a result, the (a)(3) factors, and other Commerce Clause factors, must be retained as providing a basis for Clean Water Act jurisdiction over intrastate and other waters.

3. Regulation of Waters Identified in 33 C.F.R. 328.3(a)(3)(i)-(iii) is Clearly Authorized by the Commerce Clause Because the (a)(3) Factor Activities Substantially Affect Interstate Commerce

As discussed above, the waters identified by the (a)(3) factors fall squarely within the scope of the Commerce Clause because: (1) the factors are limited on their face to providing a basis for jurisdiction only where waters are used for purposes that could affect interstate commerce; and (2) the factor activities are well recognized as having a substantial affect on interstate commerce.

The location – or in the case of the Clean Water Act, the character of the water – in which the activities take place has no bearing on whether those activities have a substantial affect on interstate commerce. If economic activities or a class of economic activities, wherever they occur, substantially affect interstate commerce, the Commerce Clause authorizes jurisdiction. As a result, the character of the water has no bearing on the authority to regulate under the Commerce Clause. See, e.g., Ho v. United States, 311 F.3d 589 (5th Cir. 2002) (approving regulation of a single asbestos removal project under the Commerce Clause because such projects affect the interstate market for commercial real estate and asbestos removal); Wickard, 317 U.S. 111 (1942) (approving regulation of subsistence wheat farming under the Commerce Clause because farming substantially affects interstate agricultural markets).

Consequently, Clean Water Act regulation is justified for any water meeting the criteria set forth in the (a)(3) factors, regardless of the classification placed on it.

We note that as agencies of the Federal government, EPA and the Corps have ready access to a significant set of data demonstrating that the activities in the (a)(3) factors have a substantial affect on interstate commerce. We request that the agencies explore that data in detail. The effects data presented below is merely illustrative.

C. DISCUSSION OF COMMERCE CLAUSE FACTORS

1. Use by Interstate or Foreign Travelers for Recreation or Other Purposes

Waters of the United States, including the intrastate waters described in 33 C.F.R. 328.3(a)(3), play an important role in supporting the substantial commerce associated with fishing, hunting, wildlife watching, and recreation. These waters provide areas necessary to recreational activities such as boating, canoeing, kayaking, and swimming; and provide vital habitat and sustenance for fish, waterfowl, birds (including migratory birds), and wildlife (whether at healthy population levels, or threatened or endangered or otherwise of concern).

Numerous courts have found that such activities have a substantial affect on interstate commerce. E.g., National Association of Home Builders v. Babbitt, 130 F.3d 1041, 1052 n.11 (D.C. Cir. 1997) (travel by tourists, students, and scientists to study or observe wildlife and threatened or endangered species has substantial effect on interstate or foreign commerce); Utah v. Marsh, 740 F.2d 799, 803-04 (10th Cir. 1984) (finding that intrastate lake was used for recreation including fishing, hunting, camping, and wildlife observation, with 2% of visitors coming from out of state); Palila v. Hawaii Dep't of Natural Resources, 471 F. Supp. 985 (D. Haw. 1979), aff'd, 639 F.2d 495 (9th Cir. 1981) (travel by tourists, students, and scientists to study or observe wildlife and threatened or endangered species has substantial effect on interstate or foreign commerce); United States v. Byrd, 609 F.2d 1024, 1210 (7th Cir. 1979) (finding that the recreational use of inland lakes has a significant impact on interstate commerce, based in part on the number of out-of-state visitors visiting the lake at issue).

The economic value of recreational use of the Nation's waters is significant. For example:

> a. "In 2001 over 80 million Americans 16 years old and older, 39% of the U.S. population, enjoyed some recreational activity relating to fish and wildlife. Expenditures by this group were $110 billion, which was about 1.1% of the nation's Gross Domestic Product (GDP)." U.S. Fish and Wildlife Service, 2001 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation National Overview, Preliminary Findings ("FWS 2001 Survey") at 4.
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> b. "Almost 38 million people fished and hunted in 2001. They spent $70 billion on their activities, including $20 billion on trip expenses, nearly $41 billion on equipment, and $9 billion on licenses and fees, magazines, membership dues and contributions, and

land leasing and ownership. On average, each sportsperson spent $1,851 in 2001." FWS 2001 Overview at 4.

c. "Fishing continues to be a favorite pastime in the United States. In 2001, 16% of the U.S. population 16 years old and older, 34 million anglers, spent an average of 16 days fishing. Freshwater fishing was the most popular type of fishing with over 28 million anglers devoting nearly 467 million angler-days to the sport. . . . Anglers spent more than $35 billion on trips, equipment, licenses, and other items to support their fishing activities in 2001. The average expenditure per angler was $1,046." FWS 2001 Survey at 4.

d. "Freshwater fishing was the most popular type of fishing. In 2001, 28.4 million Americans fished 467 million days and took 365 million trips. Their expenditures for trips and equipment totaled $21.3 billion." FWS 2001 Survey at 10.

e. "Observing, feeding, or photographing wildlife was enjoyed by 66.1 million people 16 years old and older in 2001. Among this group, 21.8 million people took trips away from home . . . for the purpose of enjoying wildlife . . . . In 2001, wildlife-watching participants spent $38.4 billion" on trips, equipment, magazines, membership dues, and contributions made to conservation or wildlife-related organizations." FWS 2001 Survey at 5.

f. "Of all the wildlife watching in the United States, bird watching attracted the biggest following. Forty-six million people observed birds around the home and on trips in 2001. A large majority, 88 percent (40 million) observed birds around the home while 40 percent, 18 million, took birdwatching trips." FWS 2001 Survey at 36.

g. In 1996, sales of kayaks and canoes exceeded $99 million. Liquid Assets at 6.

2. Taking of Fish or Shellfish For Sale in Interstate or Foreign Commerce

Waters of the United States, including the intrastate waters described in 33 C.F.R. 328.3(a)(3), play an important role in supporting the substantial commerce associated with the sale of fish and shellfish in interstate or foreign commerce. As EPA has acknowledged, "commercial fishing and shellfishing industries need clean wetlands and coastal waters to stay in business." Liquid Assets at 2. The Supreme Court has ruled that Congress has the power to regulate the taking of fish in state waters that affect interstate commerce. Douglas v. Seacoast Prods. Inc., 431 U.S. 265, 281-82 (1977) (regulation of fishing in state waters); cf. Hughes v. Oklahoma, 441 U.S. 322 (1979) (finding intrastate harvest of minnows within reach of dormant Commerce Clause). Such an effect is quite direct when the fish and shellfish are sold directly in interstate commerce. See, e.g., Wickard, 317 U.S. 111 (approving regulation of wheat farming for personal consumption under the Commerce Clause because wheat farming substantially affects interstate agricultural markets).

The economic value of fish and shellfishing sold in interstate commerce, and of healthy waters that support those activities is substantial. For example:

a. "Wetlands provide critical habitat during various life cycle phases for about 70 percent of all commercial fish species." Liquid Assets at 7.

b. "Every year, the Great Lakes, Gulf of Mexico, and coastal areas produce more than 10 billion pounds of fish and shellfish." Liquid Assets at 2.

c. In 1998, degradation of the Nation's waters resulted in 2,506 fish consumption advisories or bans in areas where fish were too contaminated to eat. Liquid Assets at 2.

d. "Following a three-year analysis of the salmon decline, the California Legislature recently concluded that rebuilding salmon runs to twice their depressed 1980s levels would provide economic benefits to the state of $150 million a year. Full implementation of the doubling effort over several years would yield $6 billion in net profits to the state, $1 billion in profits to small businesses." In 1993, Congress appropriated $70 million towards restoration of just the Northwest salmon watersheds. Kier, W. (1994), *Fisheries, Wetlands, and Jobs, The Value of Wetlands to America's Fisheries*, Prepared for the Campaign to Save California Wetlands at 6.

3. Use for Industrial Purposes by Industries in Interstate Commerce

Waters of the United States, including the intrastate waters described in 33 C.F.R. 328.3(a)(3), play an important role: in industrial production and the discharge of pollutants for industrial production; as sites for commercial construction and site development; in resource extraction; and in energy production.

The significant use of waters for industrial production is perhaps best exemplified by the National Pollutant Discharge Elimination System, a permit program applicable to point source discharges into the Nation's waters that is specifically designed to reduce the amount of pollution entering the Nation's waters from, among other things, industrial and commercial enterprises. 33 U.S.C. § 1342. Discharges of pollutants into surface waters are caused primarily by industrial and commercial operations, including manufacturing, construction, resource extraction, land development, agriculture, and waste disposal. See, e.g., 40 C.F.R. Parts 403-610 (EPA effluent guidelines for 73 categories of industrial activities, filling over 1500 pages of the Code of Federal Regulations).

Intrastate waters used to produce goods or products sold in interstate or foreign commerce have been found to be subject to Clean Water Act jurisdiction. See United States v. Earth Sciences, Inc., 599 F.2d 368, 375 (10th Cir. 1979) (finding Clean Water Act jurisdiction over intrastate stream flowing into reservoir used to irrigate crops sold in interstate commerce); Utah v. Marsh, 740 F.2d 799, 803-04 (10th Cir. 1984) (finding Clean Water Act jurisdiction over waters of intrastate lake used for crop irrigation).

The impact on interstate commerce of industrial uses of the Nation's waters by industries in interstate commerce is significant. For example,

a. "Manufacturers use about nine trillion gallons of fresh water every year. The soft drink manufacturing industry alone uses more than 12 billion gallons of water annually to produce products valued at almost $58 billion." Liquid Assets at 2.

b. While the "size and nature of American industries vary widely . . . nearly all of them share a common need – a reliable source of water to support operations." Liquid Assets at 8.

c. In 1993, the United States produced 612,000 metric tons of peat with a value of $16.8 million. Peat is harvested directly from wetlands, and is both exported and sold in interstate commerce. McClaskey, J.A. and S.D. Smith. 1995. Survey Methods and Statistical Summary of Nonfuel Minerals – 1993. U.S. Department of Interior, Bureau of Mines.

D. MANY OTHER FACTORS ESTABLISH CLEAN WATER ACT JURISDICTION, BUT NO RULEMAKING IS REQUIRED TO ENSURE CLEAN WATER ACT JURISDICTION BASED ON THESE FACTORS

Many other Commerce Clause factors support Clean Water Act jurisdiction, but no rulemaking is required to ensure Clean Water Act jurisdiction based on such other factors. Because the Clean Water Act asserts Commerce Clause jurisdiction, any factors that fall within the scope of the Commerce Clause already provide a basis for jurisdiction regardless of whether they are specifically listed in regulation.

Examples of "other" factors that clearly fall within the Commerce Clause include: use as habitat for threatened and endangered species; use for agriculture and silviculture; use for flood control; pollution control; and to ensure and provide clean and safe water, including drinking water. The clear Commerce Clause connections with some of these factors are described below.

1. Use as Habitat for Threatened and Endangered Species

The Commerce Clause authority of Congress to regulate activities that affect threatened and endangered species is well-established.[31] Waters of the United States, including the waters described in 33 C.F.R. § 328.3(a)(3), provide vital habitat (e.g., use for breeding, rearing, feeding) for numerous threatened and endangered species of birds, fish, amphibians, mammals, reptiles, clams, snails, and plants, to name a few. Thus, healthy waters play an important role in supporting the substantial commerce associated with threatened and endangered species. And measures to regulate activities that affect those waters prevent the disruption of interstate commerce that would flow from species extinctions and by preserving the opportunity for such commerce to continue into the future. "[T]he power to regulate commerce among the several States necessarily includes and properly includes the power to preserve the natural resources that generate such commerce." Gibbs v. Babbitt, 214 F.3d at 506.

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[31] See Gibbs v. Babbitt, 214 F.3d 483 (4th Cir. 2000) (regulation of 'take' of red wolves on intrastate federal and private lands is a valid exercise of Commerce Clause power because of potential economic activities that would substantially affect interstate commerce); National Association of Homebuilders (NAHB) v. Babbitt, 130 F.3d 1041 (D.C. Cir. 1997), cert. denied, 118 S. Ct. 2340 (1998) (applying the ESA's 'take' provision to a private company's development of a city intersection is valid under the Commerce Clause because the "substantially affects" test is met); GDF Realty Investments, Ltd. v. Norton, No. 01-51099, 2003

Several courts have sustained federal measures to protect wildlife or its habitat under the Commerce Clause based upon interstate commerce in wildlife-related study and tourism.[32] Extinction of such wildlife species would substantially affect interstate commerce by foreclosing the opportunity for continued availability of a wide variety of species to commerce. See

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U.S. App. LEXIS 5818 (5th Cir. March 26, 2003) (intrastate takes of listed species may be aggregated with other takes, having a substantial effect on interstate commerce); Rancho Viejo v. Norton, No. 01-5373, 2003 U.S. App. LEXIS 6218 (D.C. Cir. April 1, 2003) (applying NAHB rationale in upholding federal authority under Commerce Clause); Shields v. Babbitt, 229 F. Supp. 2d 638 (W.D. Tex. 2000) (rejecting private landowner's claim that regulating 'take' of an endangered species found exclusively within Texas was beyond the reach of the Commerce Clause power); Bldg. Indus. Ass'n of Superior California v. Babbitt, 979 F. Supp. 893, 906-08 (D.D.C. 1997), appeal dismissed, 161 F.3d 740 (D.C. Cir. 1998) (FWS listing of fairy shrimp species, possibly found exclusively in California, found to be constitutional under the Commerce Clause) (citing NAHB and Palila v. Hawaii Dept. of Land and Natural Resources, 471 F. Supp. 985 (D. Hawaii 1979), aff'd, 639 F.2d 495 (9th Cir. 1985)). Cf. United States v. Bramble, 103 F.3d 1475 (9th Cir. 1997) (application of the Bald Eagle Protection Act to purely intrastate activities is valid under the Commerce Clause because the threatened extinction of eagles substantially affects commerce).

[32] See, e.g., Gibbs v. Babbitt, 214 F.3d at 497 ("The protection of the red wolf on both federal and private land substantially affects interstate commerce through tourism, trade, scientific research, and other potential economic activities."); Bramble, 103 F.3d at 1481 ("[E]xtinction of the eagle would substantially affect interstate commerce by foreclosing any possibility of . . . future interstate travel for the purpose of observing or studying eagles."); Utah v. Marsh, 740 F.2d 799, 803 (10th Cir. 1984) (sustaining application of CWA to intrastate lake under Commerce Clause based upon interstate movement of travelers "to observe, photograph, and appreciate a variety of bird and animal life"); United States v. Byrd, 609 F.2d 1204, 1210 (7th Cir. 1979) (same based upon "number of out-of-state visitors" drawn to lake by the abundance of fish and other wildlife inhabiting them"); Palila v. Hawaii Dept. of Land and Natural Resources, 471 F. Supp. 985, 995 (D. Hawaii 1979), aff'd, 639 F.2d 495 (9th Cir. 1985) ("[A] national program to protect and improve the natural habitats of endangered species preserves the possibilities of . . . interstate movement of persons, such as amateur students of nature or professional scientists who come to a state to observe and study these species, that would otherwise by lost by state inaction.").

National Ass'n of Homebuilders, 130 F.3d at 1054 ("[R]egulation of the 'taking' of endangered animals is within [the] Commerce Clause power because such takings, if permitted, would have a substantial effect on interstate commerce by depriving commercial actors of access to an important natural resources - biodiversity."). This extends to species both known and unknown to generate interstate commerce. While impossible to quantify the economic impact represented by the loss of any particular species not presently used for commercial purposes, "[i]n the aggregate, however, we can be certain that the extinction of species and the attendant decline in biodiversity will have a real and predictable effect on interstate commerce." Id. at 1053-54. See also GDF Realty Investments, 2003 U.S. App. LEXIS 5818, at *52 ("the link between species loss and a substantial commercial effect is not attenuated").

Of course, many diverse species directly provide readily measurable economic benefits. For example:

** Coho salmon "have been targeted in recreational and commercial fisheries since the early 1800s," 62 Fed. Reg. 24588 (1997), and intermittent streams are important refuge for juvenile coho, Leslie M. Reid and Robert R. Ziemer, *Evaluating the Biological Significance of Intermittent Streams*, USDA Forest Service, Pacific Southwest Research Station (1994), available at http://www.rsl/psw.fs.fed.us/projects/water/2IntermitStr.htm .

** In 1996, endangered and threatened species helped to fuel a national wildlife-related recreational industry that generated $29.2 billion in expenditures from wildlife watching alone. USFWS, 1996 National and State Economic Impacts of Wildlife Watching 2 (1998); see also Michael Milstein, Call of the Wild a Boon to Tiny Town, Billings Gazette, July 23, 1995, at D1 (describing economic boom associated with gray wolf reintroduction).

** "[N]ortheastern North Carolina could see an increase of between $39.61 and $183.65 million per year in tourism-related activities, and that the Great Smoky Mountains National Park could see an increase of between $132.09 and $354.50 million per year." Gibbs, 214 F. 3d at 493-94.

** "According to some estimates, plant extinctions alone will cause a potential loss to the United States of more than $3 billion in lost medicines by the year 2000." at http://www.defenders.org/pubs/save04.html (citing Norman R. Farnsworth, *The Role of Ethnopharmacology in Drug Development*, in Bioactive Compounds from Plants (Ciba Foundation Symposium, 1990)).

** "Small communities and local economies benefit most from America's passion for wildlife. The annual migration of the sandhill crane and whooping crane brings 80,000 tourists and $15 million to Nebraska's Platte River region each year. At Tennessee's Reelfoot Lake, bald eagle tours alone earn more than $2 million annually. Roosting bald eagles draw 50,000 visitors to tiny Sauk City, Wisconsin, pumping more than $1 million into the county." *Saving America's*

Wildlife: Renewing the Endangered Species Act, Section 1, *available at* http://www.defenders.org/pubs/save04.html .[33]

** "Salmon and steelhead fishing was once a very valuable industry to the west coast economy. As recently at 1988, according to independent economic studies, salmon and steelhead fishing in Oregon, Washington, Idaho and Northern California brought in $1.25 billion to the regional economy and supported an estimated 62,750 family wage jobs. Since then, many salmon runs have declined because of a combination of many factors including too many dams and widespread habitat loss." Facts About Pesticides, Salmon, and the Endangered Species Act, *available at* http://www.pesticide.org/Salmonfactsheet.html (*Quoting* "The Economic Imperative of Protecting Riverine Habitat in the Pacific Northwest," Pacific Rivers Council Research Report No. 5 (January, 1992)). "[I]ntermittent channels are important winter refuge for juvenile coho and steelhead." See Reid and Ziemer, supra at 3.

2. Flood Control

Intrastate and other wetlands, small streams, and waters play a major role in reducing flood damage. The cumulative loss of wetlands has been found to result in increased runoff and consequent flooding. Wetlands help ameliorate floods by helping to store floodwaters and prevent or reduce run off. When wetlands are destroyed they often are replaced by structures or impermeable paving that increases runoff.

It is well established that the Commerce Clause extends to flood control. United States v. Appalachian Electric Power Co., 311 U.S. 377, 426 (1940); Oklahoma v. Atkinson Co., 313 U.S. 508, 525 (1941) ("There is no constitutional reason why Congress cannot, under the commerce power, treat the watersheds as a key to flood control on navigable streams and their tributaries.").

Economic impacts associated with losing flood control capabilities are significant. For example:

a. Flood prone areas of the United States cover approximately 15,000 square miles and put at least 9.6 million homes and $390 billion in property at risk. Federal Interagency Floodplain Management Task Force. 1994. A Unified National Program for Floodplain Management. Federal Emergency Management Agency at 3.

b. In Fiscal Year 1998, direct flood damages in the United States were estimated at $8.73 billion and 98 lives were lost. National Oceanic and Atmospheric Administration,

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[33] The Sandhills, wetlands and wet meadows in north-central and northwestern Nebraska, are among three major wetland resource areas in Nebraska that provide spring staging areas, breeding areas, migration and wintering habitat for the whooping crane and bald eagle. See Tiner, R.W., H. C. Bergquist, G. P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Selected Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA, available at < http://wetlands.fws.gov/Pubs_Reports/isolated/report.htm >.

National Weather Service, Hydrologic Information Center. 1998. Flood losses: Compilation of Flood Loss Statistics.

3. Clean and Safe Water, Including Drinking Water

Small streams, wetlands and other waters – including intrastate waters – filter water and recharge surface and subsurface drinking water supplies, and filter and remove pollutants from surface run-off before that water is released to groundwater or surface waters or is taken up by plants and animals and widely dispersed throughout the food chain. Millions of people in the United States depend on intrastate waters for these services.

Contaminated water has a substantial and significant affect on interstate commerce. For example:

a. "Currently EPA estimates that at least a half-million cases of illness annually can be attributed to microbial contamination in drinking water." Liquid Assets at 2.
b. "Seventeen states reported 37 recreational water outbreaks caused by microorganisms in the latest (1995-1996) available data from the Centers for Disease Control." Liquid Assets at 2.
c. "In 1998 about one-third of the 1,062 beaches reporting to the U.S. Environmental Protection Agency (EPA) had at least one health advisory or closing". Liquid Assets at 2.
d. "In 1998 2,506 fish consumption advisories or bans were issued in areas where fish were too contaminated to eat." Liquid Assets at 2.

4. Use by Migratory Birds

Wetlands and other waters play a critical role in providing habitat for migratory birds and other types of wildlife. According to the U.S. Fish and Wildlife Service ("FWS"), all migratory waterfowl and nearly half of all threatened or endangered species depend on wetlands and associated habitat for their survival. The FWS has also found that the loss of wetland and associated upland habitat is the most significant problem facing North American Migratory bird populations. U.S. Fish and Wildlife Service. 1994. 1994 Update to the North American Waterfowl Management Plan at 20. Washington, D.C.

Protection of migratory birds has been a long-standing concern and obligation of the Federal government. North Dakota v. United States, 460 U.S. 300, 309 (1983). In addition to protections provided by other environmental and wildlife protection statutes, Congress has passed numerous laws that focus specifically on protecting migratory birds, including but by no means limited to: the Airborne Hunting Act, the Bald Eagle Protection Act, the Migratory Bird Hunting and Conservation Stamp Act, the Migratory Bird Treat Act, and the Migratory Bird Hunting Stamp Act.

The U.S. Supreme Court has recognized that migratory birds and other wildlife are articles of interstate and foreign commerce that can be protected under the Commerce Clause. Andrus v.

Allard, 444 U.S. 51, 63 n.19 (1979) (recognizing commerce power to protect migratory wildlife); Missouri v. Holland, 252 U.S. 416, 433 (1920) ("It is obvious that there may be matters of the sharpest exigency for the national well-being that an act of Congress could not deal with, but that a treaty followed by such an act could."). Courts have also found that the "Commerce Clause power, and thus the Clean Water Act, is broad enough to extend . . . jurisdiction to local waters which may provide habitat to migratory birds and endangered species." Leslie Salt v. United States, 896 F.2d 345, 360 (9th Cir. 1990), cert. denied, 498 U.S. 1126 (1991) (remanding the case for a factual determination of the sufficiency of the property's connections to interstate commerce).

The economic value of healthy migratory bird populations is significant. For example:

- In 2001, 3 million Americans hunted migratory birds. "They spent 29 million days hunting birds such as waterfowl and dove. Their trip and equipment expenditures totaled $1.4 billion." This is 7 percent of the total hunting expenditures nationwide. FWS 2001 Survey at 22, 23.

- The 3 million migratory bird hunters in 2001 took "24 million trips for hunting birds such as doves, ducks, and geese. Migratory bird hunters spent an average of 10 days hunting for the year." FWS 2001 Survey at 25.

- Of the $1.4 billion spent by migratory bird hunters in 2001, "$657 million was spent on hunting trips, including $280 million on food and lodging (43 percent of trip related expenses), and $247 million on transportation (38 percent of all trip costs). Other trip expenses amounted to $130 million—20 percent of the total trip-related expenditures for migratory bird hunters." FWS 2001 Survey at 25.

- "Migratory bird hunters purchased nearly $732 million worth of equipment in 2001. They spent $534 million on hunting equipment (guns, ammunition, etc.). Another $68 million was spent by migratory bird hunters on auxiliary equipment (camping equipment, binoculars, etc.), and $130 million was spent on special equipment (vans, trail bikes, etc.)." FWS 2001 Survey at 25.

- "Among those hunting migratory birds, 1.6 million enthusiasts hunted duck on 18 million days. Nearly 1.5 million participants hunted dove on 9 million days. On 11 million days, 1 million hunters hunted geese in 2001. Other migratory bird species attracted 210 thousand people who hunted on 1.5 million days." FWS 2001 Survey at 26.

IV. THERE IS NO NEED TO DEFINE THE TERM "ISOLATED WATERS" AS FEW, IF ANY WATERS ARE ACTUALLY "ISOLATED"

Question #2 asks "Should regulations define "isolated waters," and if so, what factors should be considered in determining whether a water is or is not isolated for jurisdictional purposes."

The long-standing regulatory definition of "waters of the United States" should not be re-written to exclude an undefined, administratively-created category of waters called "isolated" by the EPA and Corps. The questions posed by the ANPRM signal an intent by the agencies to redefine "waters of the United States" to try to remove federal Clean Water Act jurisdiction from so-called "isolated" non-navigable, intrastate waters, including wetlands, natural ponds, ephemeral and intermittent streams, and potentially larger non-navigable tributaries as well.

These waters, protected by the Clean Water Act and its regulations since 1972, serve critical functions in the environment important to public health, drinking water supplies, flood prevention and control, habitat for fish and wildlife species, recreation, industrial purposes and many other uses. (See below in this section for further discussion of the connectivity of all waters, as well as the discussion of "Functions and Values," below).

In addition, few if any of these waters are in fact "isolated." They are integral parts of the entire hydrologic and biologic environment. Headwater streams, non-navigable tributaries, wetlands and other such waters are not "isolated" from the rest of the environment, and should not be so treated by the federal agencies charged by law with protecting these vital resources through some regulatory rewrite of definitions that has no basis in science, fact or law.

The following comments summarize the specific ways in which wetlands and small streams, particularly those that are ephemeral and intermittent, may appear to be "isolated," but are in fact intimately and inextricably connected - hydrologically, chemically, and biologically - with larger streams, rivers, and other waters.

A. HEADWATER STREAMS CANNOT BE SEPARATED FROM DOWNSTREAM WATERS

Starting with the clearest case, the concept of "isolation" can have no conceivable application to streams. By their nature, streams are not simply individual water courses, but parts of an interconnected and inseparable network. As some of the nation's leading stream scientists have noted in comments submitted to the docket (Aquatic scientists' comment letter to the docket, 2003):

> "Rivers are networks, and their downstream navigable portions are inextricably linked to small headwaters just as fine roots are an essential part of the root structure of a tree or our own circulatory system is dependent on the function of healthy capillaries. The small ephemeral stream is not isolated from the mighty river."

The key to understanding stream ecosystems is the "river continuum concept," first introduced by Vannote and others nearly a quarter-century ago. The basic concept is that a river system, from headwaters to mouth, comprises a continuous gradient of physical factors, formed by the drainage network, that explain much of the biological linkages and other river dynamics (Vannote *et al.* 1980). Scientists now view stream ecology as a three-dimensional system of energy, material and organisms consisting of: (1) the longitudinal (downstream) dimension, (2) lateral transfers between channel, banks, and floodplain, and (3) vertical transfers between stream and groundwater. Although each of these dimensions is essential to river health, upstream-downstream connections are dominant (Meyer and Wallace 2001). As noted by leading stream and wetland ecologists in a draft publication on headwaters streams:

> "Each stream network is part of a watershed, the contributing land area from which waters and other materials collect and flow into streams and larger river channels. Channels are the routes along which water, sediment, organic matter, nutrients, and other solutes are carried out of the watershed; channel size is a continuum, and hence only arbitrary distinctions can be made between very small streams and the network of larger downstream channels." (Meyer *et al.* In preparation).

Further, because small streams are extensive and inseparably bound up with the entire river system, changes to headwaters streams and their watersheds have an enormous impact on the physical and hydrological, chemical and biological integrity of downstream waters.

1. Streams Have Hydrologic Connections to Other Waters

Streams that under natural conditions run dry periodically or during droughts, or that carry surface water flows only briefly during periods of precipitation (such as some ephemeral streams in arid regions), may appear superficially to be "disconnected" from other perennially flowing reaches of the same system. However, scientific research has revealed essential, consistent hydrologic connections that prove that these systems are rarely, if ever, disconnected even when there is no visible flow at the surface.

a. Intermittent and Ephemeral Surface Connections

By well-accepted definition (Alley *et al.* 1999), the term "stream" includes many waters that do not flow year round. These "intermittent" and "ephemeral" streams are still considered in science and in law to be hydrologically connected - through surface flows during wet periods and sub-surface flows at other times - to downstream waters that flow perennially. Intermittent and ephemeral streams are the vast majority of all streams, both in numbers and stream miles, and they have their own unique and important physical, chemical, and biological properties.

According to an analysis conducted for American Rivers by USGS National Hydrographical Database staff using coarse resolution data (1:100,000 scale), there are approximately 1,594,359 miles of intermittent and 899,347 miles of perennial streams in 49 states, excluding Alaska (Paul Wiese, USGS National Mapping Division, personal communication). In other words, for every mile of perennial stream, there are approximately 1.77 miles of intermittent streams. These figures significantly understate the true extent of intermittent and ephemeral streams (Meyer and Wallace 2001). In some states, particularly those in the arid West, as much as 96 percent of streams (Arizona) are intermittent. Even in humid, high-rainfall states, such as Georgia, 44,000 of the state's reported 70,000 total stream miles are intermittent (U.S. EPA 2000). Even at times where there may be no visible surface flow, such streams can continue to flow within their beds, moving water, nutrients, biota and other material downstream (Aquatic scientists' comment to the docket 2003).

b. Ground-surface Water Connections

Groundwater and surface water are in constant interaction. Some streams gain water from groundwater inflow, some streams lose water outflow to groundwater, many streams do both, gaining in some reaches and losing in other reaches (Alley *et al.* 1999). As the USGS notes in one of its main reports on groundwater:

> "Streams and other surface-water bodies may either gain water from ground water or lose (recharge) water to ground water. Streams commonly are a significant source of recharge to ground water downstream from mountain fronts and steep hillslopes in arid and semiarid areas and in karst terrains (areas underlain by limestone and other soluble rocks)...The top of the subsurface ground-water body, the water table, is a surface, generally below the land surface, that fluctuates seasonally and from year to year in response to changes in recharge from precipitation and surface-water bodies (Alley *et al.* 1999)."

Because of this interaction, groundwater can contribute a significant proportion of the surface flow in streams and rivers, depending on region, season, and stream characteristics. While groundwater contributions to stream flow vary widely according to these factors, USGS estimates that between 40 to 50 percent of streamflow on average comes from groundwater, with as much as 40 percent of flows in large rivers coming from groundwater nationally (Alley *et al.* 1999). Small streams are a main source of these groundwater flows, which may be discharging groundwater drawn from vast distances away from the stream channel itself. As USGS describes the process: "Under natural conditions, ground water moves along flow paths from areas of recharge to areas of discharge at springs or along streams, lakes, and wetlands...The areal extent of ground-water-flow systems varies from a few square miles or less to tens of thousands of square miles (Alley *et al.* 1999)."

In fact, it can be difficult to determine whether a stream is naturally perennial or intermittent, as leading stream ecologists have pointed out in their comments on the ANPRM:

> "Groundwater withdrawal for irrigation and other human uses has resulted in significant lowering of the water table in many areas, which can affect headwater streams by making perennial streams ephemeral (Postel 1999). Channels without water can extend far downstream; for example, a channel of the Santa Cruz River near Tucson, Arizona, was dry for several decades because of groundwater pumping (Grimm *et al.* 1997). As more of the landscape is covered with impervious surface, groundwater recharge is reduced, leading to lower baseflows which can lead to intermittent flow (Paul and Meyer 2001). In contrast,

> some intermittent streams have become perennial because of the continuous addition of effluent from municipal wastewater treatment plants (Paul and Meyer 2001). These common situations further illustrate the difficulty and illogic in trying to define some waters as "isolated" based on flows; it will be difficult even to properly determine whether a stream is naturally perennial or intermittent" (Aquatic scientists' comment to the docket, 2003).

A second type of surface-subsurface exchange occurs in the hyporheic zone, the transition zone between groundwater and the stream itself.[34] This area has unique properties, performing essential functions for the local stream and downstream ecosystems. In the hyporheic zone, surface and ground waters are virtually indistinguishable, representing "a hydrological continuum, preventing a clear separation." (Brunke and Gonser 1997) The hyporheic zone can extend a significant distance from the stream channel itself, and the area does not require visible surface water in the river to remain chemically and biologically active. Thus, even without apparent surface flows in a stream at a given time, important ecological functions and ecosystem services are occurring that are based on hidden hydrologic interactions (Brunke and Gonser 1997).

c. Small Streams Sustain Natural Flows and Water Supplies

Small streams cannot be separated from downstream waters because they literally provide much of the water balance upon which those systems depend. In the Great Lakes Basin, for example, USGS estimates that over 31 percent of the water entering Lake Michigan comes from indirect groundwater discharges to streams that then flow into the lake (Grannemann *et al.* 2000). For the other Great Lakes, the percentage of indirect ground-water discharge from streams is also quite high, ranging from 22 percent for Lake Erie, 33 percent for Lake Superior, and 42 percent for both Lake Huron and Lake Ontario (Holtschlag and Nicholas 1998). As the USGS comments in its report: "Ground water is a major natural resource in the Great Lakes Region that helps to link the Great Lakes and their watershed (Grannemann *et al.* 2000)." Of course, this would not be the case without the connection provided by small streams between groundwater and the lakes themselves.

In the Chesapeake Bay Basin, nearly 100,000 miles of interconnected streams, rivers, wetlands and their riparian areas serve as a "circulatory system" for the Chesapeake Bay. Collectively, this network of small streams supplies 90 percent of the freshwater flow that drives the health of the nation's largest estuary (CWP and NEETF 2002a). USGS has done extensive research on water quality and quantity of streamflow into the Bay. It estimates that of the 50 billion gallons of water that reaches the Chesapeake Bay each day, nearly 27 billion gallons is from groundwater base flow, i.e, water that infiltrates into the aquifer and discharges as groundwater into small streams (Bachmann *et al.* 1998). Again, without these small streams and wetlands, these groundwater and other flows would not reach the Bay with the timing, amounts, and chemical composition that they do today.

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[34] A general definition of the hyporheic zone proposed by White (1993, as cited in Brunke and Gonser, 1997) is the area of saturated pores beneath the stream bed , and into the stream banks, that contain some proportion of channel water, or that have been altered by surface water infiltration.

Even the contribution of low-flow streams, such as those with annual average flows of five cubic feet per second (cfs) or less, is essential to downstream flows and water supplies. In the Chesapeake Bay watershed, for example, as much as 65 percent of first, second, and third order streams may fall below a 5 cfs threshold (Thomas Schueler, Center for Watershed Protection, personal communication). In Kansas, the U.S. Geological Survey (USGS) determined that 40 percent of the 2,232 stream segments on the Kansas surface water register had median flows less than 1 cfs over the available hydrologic record (Perry *et al.* 2002).

As ecologist Bruce Wallace commented at a U.S. Fish and Wildlife Service symposium on the value of headwater streams:

> "Another myth is that only flows greater than 5 cfs are streams. Only a lawyer would debate this question. How much is 5 cfs? -- over 1 billion gallons of water per year. The average city in the US uses 100/gal/day/per capita for personal use. In other words, if you looked at this in terms of how many people's water needs this could supply in a year, it's 32,300 people. Or, it would supply the personal and industrial needs of 16,000 people (U.S. FWS 2000)."

The value of these small freshwater flows is enormous. One study calculated the average value of freshwater for navigation alone to be $146 per acre-foot for the entire U.S. (Frederick, *et al.* 1996, as cited in VA Dept. of Conservation and Recreation 2001). A small stream flowing as little as 1 cfs per day carries a volume of two acre-feet of water (CWP and NEETF 2002b). Thus, for the Chesapeake Bay, where 100,000 streams produce 90 percent of the fresh water flowing into the Bay, small streams are producing an annual value of $9.5 billion in flows for navigation *alone*.[35/]

d. Small Streams Provide Natural Protection Against Downstream Flooding

The process of natural flood storage and attenuation is often described as temporary storage of flood water on wide floodplains associated with higher-order streams. However, the geomorphology of small headwater channels can be an important influence on smaller, more frequent floods. Five-year to 50-year flood discharges are strongly influenced by channel size and shape. During floods, small streams transfer water into storage through infiltration into the channel bed and banks, recharging the hyporheic zone and surrounding groundwater, and diminishing peak discharges (Meyer *et al.* In preparation).

When small headwater channels are lost, flood frequency in the basin increases, with the stream equaling or exceeding bankfull at 10-20 times its previous frequency. Impervious surfaces and storm drains together deliver water from the basin to downstream channels much more rapidly

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[35] Assumes: 100,000 streams producing 90% of fresh water flow, at 2 acre-ft. per stream per day flowing an average of 1cfs, at a value of $146 per acre-foot.

than intact headwater streams (Meyer and Wallace, 2001). As Poff *et al.* (1997) note in their landmark article on the "natural flow regime" of rivers, small stream networks provide natural flood attenuation:

> "As one proceeds downstream within a watershed, river flow reflects the sum of flow generation and routing processes operating in multiple small tributary watersheds. The travel time of flow down the river system, combined with nonsynchronous tributary inputs and larger downstream channel and floodplain storage capacities, act to attenuate and to dampen flow peaks."

2. Streams Have Chemical Connections to Other Waters

a. Sediment Retention and Capture

While the greatest volume of sediment in any particular location is on large floodplains of higher-order streams, the *cumulative* sediment storage in headwaters channels and vegetated riparian zones is significant, due to the total stream length and watershed area represented by headwater streams (Meyer *et al.* In preparation). Many small headwater streams are easily obstructed by woody debris, and such features increase the potential for storage of sediment as well as organic matter and nutrients (Meyer and Wallace 2001). In small headwater streams, even relatively small woody debris jams can be important to sediment retention (Gomi *et al.* 2002).

A study in Corvallis, Oregon showed that even ephemeral streams were effective in removing from the water column suspended sediment generated from forest roads over a 80-yard headwaters stream reach (Dieterich and Anderson 1998, as cited in Meyer *et al.* In preparation). The filtration efficiency of ephemeral headwater streams results from the shallow water column combined with the large number of retentive structures – both organic debris and living plants – and, more importantly, from the pattern of lateral and longitudinal expansion and contraction in response to rainfall. In small headwaters, stream levels peak shortly after the heaviest rain and lasts only briefly before receding. During expansion, water movement is mostly into the soil. Therefore, much of the sediment in the stream water is actually filtered through the soil rather than flushed downstream (Dieterich and Anderson 1998, as cited in Meyer *et al.* In preparation).

As headwater areas are subjected to commercial and residential development, impervious surfaces replace natural lands that once absorbed and infiltrated precipitation, and natural stream channels are often replaced with storm sewers. These hard surfaces and artificial channels increase runoff rates and volumes, causing downstream stream channels to enlarge and become incised in response to the increased energy of the urban runoff. This begins a chain reaction in which downstream natural water attenuation and storage capacity is also degraded, causing higher, more rapid flood peaks. Sediments that might otherwise have been trapped by debris and leaf litter in small streams and vegetated riparian zones are now mobilized and transported downstream. Higher velocity discharges exacerbate the problem, scouring stream channels and adding still more to downstream sediment loads (Meyer *et al.* In preparation).

These sediment loads can be substantial. In San Diego, extensive channel erosion contributed two-thirds of the in-stream sediment load and resulted in loss of valuable urban land (Trimble 1997). A Pennsylvania study showed that in just a one-quarter mile stream reach in a 160-acre urbanizing watershed, channel erosion can generate 50,000 cubic feet (2,500 tons) of sediment, equivalent to five years sediment production in a non-urban watershed of the same size (Leopold 1968).

Sediments no longer held by headwaters streams and additional sediment scoured out of stream channels by increased flow peaks are carried downstream where they harm navigation, reservoir capacity, commercial and sport fishing, water recreation, and aquatic habitats and organisms. Dredging of commercial waters is extremely expensive; for example, it costs $10 to $11.5 million annually to dredge and dispose of sediments deposited into Baltimore Harbor to keep it navigable (Chesapeake Bay Program 1998, as cited in Virginia Department of Conservation and Recreation 2001). It would cost an estimated $333,000 to remove the 50,000 cubic feet of sediments produced by the small watershed Leopold studied, based on an estimated cost of $20 per cubic yard to dredge, transport, and dispose of such sediments (Virginia Department of Conservation and Recreation 2001).

Suspended sediments and contaminants that may attach to soil particles are also a significant cost to water filtration plants. A study of treatment costs associated with turbidity in Texas water filtration plants found that every one percent reduction in a unit of turbidity (NTU, or nephelometric turbidity unit) resulted in a 0.27 percent reduction in treatment chemical costs (Dearmont *et al.* 1998, cited in USEPA 2002b).

The release into the water column of suspended sediments and mobilized contaminants can devastate the aquatic ecosystem at all trophic levels. Suspended sediments reduce light penetration through the water column, reducing photosynthesis and primary production. Reduced photosynthesis weakens and can eliminate submerged aquatic vegetation, rendering the vegetation unable to contribute to sediment stabilization, to dissolved oxygen levels, and to primary productivity. (See, e.g., 40 C.F.R. §230.21).

When sediment disrupts production of the periphyton and aquatic macrophytes that form the base of the food chain, benthic and other invertebrates decline. Sediment resuspension and deposition also directly reduce productivity and species diversity among macroinvertebrates. Sediment suspension and deposition smother critical benthic habitat and reduce the availability of food and oxygen to benthic organisms. When suspended sediments settle on attached or buried eggs, the eggs are smothered because they lose access to oxygenated water. (See, e.g. 40 C.F.R. 230.31). Macroinvertebrates, in turn, are a key food source for fish. Macroinvertebrate declines stress fish populations.

In addition to reducing their food supplies, suspended sediments harm fish and crustacea, smothering spawning and nursery habitat, and directly cutting off oxygen to eggs and fry. Resuspended sediments also harm sight-feeding fish, shellfish, and wildlife by reducing water clarity and reducing feeding ability. Reduced food levels and lower feeding rates limit growth and lower disease resistance. High suspended sediment levels can also cause fish kills (Newcombe and MacDonald 1991).

b. Nutrient Recycling

The basic chemical composition of unpolluted streams draining a landscape is largely established in headwater streams. Headwater streams are also sites of efficient retention and transformation of nutrients. Just as human capillaries are the vessels in most intimate contact with metabolizing tissues, headwater streams are the channels of the drainage network in closest contact with the soil and are the sites of extensive chemical and biological activity that impact water quality downstream (Meyer *et al.* In preparation).

Recent research has demonstrated that small streams in the network are the sites of the most active uptake, transformation, and retention of nutrients. Small streams are shallow, and water spends a longer time in contact with biologically and chemically reactive substrates in small, shallow channels than in large deep rivers. The average distance traveled by a molecule before being removed from the water column is called its uptake length (Newbold *et al.* 1981). As stream size (and discharge) increases, so does nutrient uptake length (Alexander *et al.* 2000, Peterson *et al.* 2001). Uptake lengths have been measured for nutrients in many streams, and the shortest measures of uptake length are for small headwater streams (Stream Solute Workshop 1990, as cited in Meyer *et al.* In preparation). Peterson *et al.* (2001) studied the regulation of water chemistry by stream systems and found small streams to be far more efficient in recycling nutrients. In a study of the Mississippi River's nitrogen loads to the Gulf of Mexico and attendant hypoxia problems, Alexander et al (2000) found that small streams throughout the Basin were most efficient at recycling nitrogen:

> "Headwater streams retain and transform important amounts of inorganic nitrogen, frequently more than 50% of the inputs from their watersheds…Despite the long travel times, many watersheds located on large rivers more than 2,500 kilometres [1,500 miles] from the Gulf deliver significantly larger fractions of their exported nitrogen (some more than 90%) to coastal waters than watersheds located on smaller streams less than a few hundred kilometers from the Gulf."

Uptake length for both phosphorus and ammonium are less than 65 feet in headwater streams in the Southern Appalachians (Webster *et al.* 2000, as cited in Meyer *et al.* In preparation). Thus, an average nutrient molecule travels less than 65 feet downstream before being removed from the water column in a small shallow stream, where there is extensive contact between the water column and benthic algae and microbes in surface sediments and the hyporheic zone. Meyer and Wallace (2001) modeled the practical effect of loss of small streams on downstream nutrient loading of soluble reactive phosphorus (S.P.) using data from field experiments at the Coweeta Hydrologic Laboratory in Western North Carolina. When phosphorus loads are modeled with first-order streams intact, 63 percent of phosphorus entering the streams is retained. When first-order streams are replaced with pipes (i.e., no S.P. removed through natural processes), the total amount of phosphorus exported downstream increases 179 percent.

In addition to the nutrient removal that occurs in headwater streams, the chemical and biological transformations that occur there (e.g. denitrification, microbial uptake, transformation to organic nitrogen) reduce the biological availability of nutrients that are exported downstream. Biofilms in small headwater channels are also sites of active uptake of inorganic (e.g. heavy metals) and organic (e.g. PCBs) pollutants (Schorer and Symader 1998, as cited in Meyer *et al.* In preparation).

Hence the presence of small streams in the network results in less downstream transport of nutrients and contaminants. If, due to a redefinition of "waters of the U.S., headwater streams were compromised or eliminated from the network, more of the nutrients being applied to farm fields or lawns would be delivered to receiving systems downstream, which are less efficient at retaining and transforming them. Downstream waterways, such as navigable rivers, lakes, estuaries, and coastal waters, may respond to the resulting high nutrient concentrations with eutrophication, and potential nuisance algal blooms, deoxygenation of the water column, and fish kills (Meyer *et al.* 2003). Federal, state, and local agencies are spending considerable sums of money implementing best management practices to reduce non-point source inputs of nutrients because these are a major threat to water quality. Maintaining the nutrient removal capacity of small headwater streams is an essential component of these efforts to reduce the impacts of non-point source nutrient loading to downstream ecosystems.

c. Other Organic Material

Plants and other organic material within the stream channel, including leaf litter and woody debris from riparian vegetation, are the origin of substantial energy inputs into river systems. Among other inputs to headwater streams are dissolved organic carbon (DOC) from groundwater. While groundwater tends to have low DOC concentrations, a two- to three-fold increase in DOC over distances ranging from 33 to 330 feet has been reported for spring seeps as the groundwater flows over accumulated detritus and living organisms (Kaplan *et al.* 1980, Meyer *et al.* 1998, as cited in Meyer *et al.* In preparation). The dramatic increases in DOC concentrations reflect the highly productive nature of spring seeps. These broad, shallow aquatic environments that are depressions in the forest floor have immediate and obvious terrestrial and benthic connections.

Headwater streams tend to be highly retentive of the large amounts of organic matter they receive. There are three primary reasons: (1) the inputs to headwater streams consist disproportionately of leaves and woody debris, neither of which are readily transported; (2) the flows are small and therefore do not easily suspend particles and (3) as a result of the previous two factors, headwater streams accumulate debris dams, which trap other organic matter and hence further enhance the retention (Webster *et al.* 1999, Fetherston et. al. 1995, Webster *et al.* 1994, Bilby and Likens 1980, Bilby 1981, Speaker *et al.* 1984, Swanson *et al.* 1982, as cited in Meyer *et al.* in preparation). Webster and Meyer (1997) found that concentrations of benthic organic matter in eight headwater forested streams to be over four times greater than in 14 higher order streams.

By intensively processing organic matter, and ultimately converting much of it to carbon dioxide, the headwater streams perform their second major ecosystem service. The accumulations of organic matter in the form of debris dams and leaf packs provide habitat for benthic macroinvertebrates (Reice 1978, Dobson and Hildrew 1992, Dobson *et al.* 1992, Richardson 1992, as cited in Meyer *et al.* In preparation), while the processing of leaves and woody debris by fungi and bacteria convert these inputs to high quality, more nitrogen-rich, food for macroinvertebrates and higher trophic levels (Kaushik and Hynes 1971, Triska and Sedell 1976, Ward and Cummins 1979, Elwood *et al.* 1981, as cited in Meyer *et al.* In preparation). If headwater streams were unable to retain and process these organic inputs, the resulting organic loading would represent a significant stress on the downstream ecosystems and water quality (Meyer *et al.* In preparation). Meyer and Wallace (2001) estimated an average turnover length of 10 miles for all of the streams in a forested fifth-order basin in North Carolina. They then estimated that if one third of total first-order stream length were removed, the average turnover length would double to 20 miles.

Although much of the organic inputs to headwater streams are oxidized before reaching downstream ecosystems, the organic carbon that is delivered to higher order streams and rivers plays a vital role in support of downstream metabolism, representing a third major ecosystem service provided by headwaters. In this respect, the headwater ecosystems not only moderate the quantity of organic carbon delivered downstream but also—and just as importantly—control its form, quality, and timing. Inputs consisting of large particles (leaves and woody debris) are reduced in size to fine, easily suspended organic particles and to dissolved organic matter. Inputs of relatively low nutritional value (high carbon to nitrogen ratios) are converted via microbial processing to more nutritious forms. Inputs that arrive in the headwaters in pulses (autumn leaf drop, storm-delivered inputs) are processed and slowly released over long periods of time (Meyer *et al.* In preparation).

3. Streams have Biological Connections to Other Waters

Freshwater species are among the most threatened on Earth, with projected extinction rates for North American freshwater species in the same range as that projected for tropical rainforests (Ricciardi and Rasmussen 1999). We discuss in greater detail later in these comments the functions and values of headwaters streams in sustaining the biological diversity of plants and animals, including for permanent habitat, spawning and breeding, and movement corridors.

Biological connectivity associated with headwater streams occurs in many ways. Headwater streams provide water, nutrients, organic material, habitat structure, and food sources downstream, and are essential to the survival of individual species and entire biological systems. Small streams are linked with other waters in the watershed as species move from one habitat to another. This biological connectivity role occurs in obvious as well as subtle ways. As Reid and Ziemer (1994) note:

> "Intermittent channels and associated riparian zones provide an important source of food and water for hillslope ecosystems, they may function as travel corridors, and they provide a microclimatic refuge for hillslope animals during times of moisture and temperature stress.

> The distinctive vegetation and higher moisture content of these sites can modify fire behavior, so their distribution might affect the patchiness of large burns. In addition, microclimatic differences provided by intermittent channels may contribute to genetic diversity by maintaining a variety of site types. For example, Campbell (1979) demonstrates genetic differences between Douglas firs growing in different microhabitats near to one another."

Small headwaters streams, including intermittent and ephemeral streams, are abundant with life, including microbes, algae, plants, aquatic insects, mollusks, crustaceans, other invertebrates, amphibians, reptiles, fish, birds, and mammals. A typical headwater stream supports hundreds to thousands of species across these plant and animal groups (Meyer *et al.* In preparation). This diversity and abundance of aquatic life is particularly notable in arid areas. The National Academy of Sciences (Committee on Riparian Zone Functioning and Strategies for Management 2002) states that in the Pacific Coast ecoregion a large proportion of wildlife species are riparian "obligates" requiring access to riparian habitat to complete all or a portion of their life cycle, including 60 percent of amphibians and 34 percent of birds. Headwaters are essential to the health of biological communities, even those far distant from the headwater stream itself.

Insects – Aquatic insects are the dominant macroinvertebrates in most headwater streams, often occurring at densities greater than 10,000 per square yard (Meyer *et al.* in preparation). Dieterich and Anderson (2000) found surprisingly diverse and abundant macroinvertebrates in summer-dry streams in western Oregon. They concluded that these organisms preferred intermittent over perennial streams because (1) the proximity to refugia prevented wash-out during rain events, (2) reduced predator pressure, and (3) lack of competition by snails and other dominant competitors. Muchow and Richardson (1999) found twice the number of individuals in intermittent streams than perennial stream sites in British Columbia. They also observed that "Even in the smallest streams with intermittent flow, true aquatic insects with 1-year life cycles were found emerging, even in periods when no flow was perceptible."

Not only do insects perform many of the important functions of organic matter processing in headwaters, but they export that energy as a valuable food source for amphibians, fish, birds, and other animals downstream. Wipfli and Gregovich (2002) found that forested, fishless headwaters in Alaska provided abundant food sources for salmon populations, and "may be important food conduits for downstream food webs, potentially subsidising several trophic levels and in turn aquatic production of larger streams."

Amphibians – Reid and Ziemer (1994) note that amphibians, while often requiring open water to breed, are heavily dependent on intermittent and ephemeral streams:

> "Intermittent streams may be particularly important as nursery areas for amphibians because these sites support fewer predators than perennial channels. Young salamanders may rear in the intermittent channels and then move downstream when they grow large enough to protect themselves (H. Welsh, USDA Forest Service Pacific Southwest Research Station, unpublished data). Some amphibians, such as the Pacific tree frog (*Hyla regilla*), may rear in ephemeral pools and then move away from the channels when pools dry up. Juvenile black

salamanders (*Aneides flavipunctatus*) may remain for several years in moist sites, such as those commonly found near intermittent channels, moving away to the forest floor only as they mature."

Fish – Headwater streams provide important spawning sites for salmonids and other fish species. Staff with Washington Trout observed 95 adult Coho salmon in 200 lineal feet of a small-order tributary of Cherry Creek in December 2002. Neither the perennial, spring-fed stream, nor the tributary streams feeding to it, are shown on USGS 1:24,000 scale topographic maps (Kurt Beardslee, Washington Trout, personal communication). Reid and Ziemer (1994) note that intermittent channels are important to fish as seasonal sources of water, nutrients, sediment, and wood delivered downstream to preferred habitats, noting that "Productivity of perennial channels depends on delivery of materials from intermittent channels during at least part of the season."

Intermittent streams also serve as feeding and spawning grounds for many migratory minnows, salmonids, and other fish, particularly in arid regions. Erman and Hawthorne (1976) observed extensive spawning by rainbow trout in intermittent tributaries of streams, with three times as many fish spawning in an intermittent stream than in nearby permanently flowing tributaries. They also found that one-third to one-half the trout production in some Sierra Nevada systems is from intermittent channels. They hypothesize that these waters were more attractive to the fish due to their abundant food source and lack of competition with brook trout.

Birds – Reid and Ziemer (1994) note that both perennial and intermittent streams are important to bird species: "A few birds, such as dippers (*Cinclus mexicanus*) and willow flycatchers (*Empidonax traillii*), are aquatic or riparian specialists. Others use the riparian zone primarily during the breeding season or immediately after. Riparian areas along both perennial and intermittent channels are particularly rich in insects and fruit, so these areas are important food sources. Many species thus include a patch of riparian vegetation as a part of their territory, even if they do not depend fully upon it."

Mammals – Reid and Ziemer (1994) also note that riparian areas are important movement, feeding, and resting areas for many mammals: "Forest mammals use riparian areas for food sources and denning, and they may also use them as travel corridors within and between watersheds…Bats are even more closely associated with riparian areas because they require pools of water to drink from, they eat insects associated with aquatic and riparian environments, and they usually roost near their foraging sites."

4. Man-made Conveyances Do Not Eliminate Connectivity of Streams

There has been some suggestion by EPA, the Corps, and industry that streams flowing through man-made conveyances, such as pipes, culverts, ditches, canals, and other man-made structures as well as waters above these points, should no longer be considered "waters of the U.S." (Izzo and Fabricant 2002). This notion is appalling. First, it would create a perverse incentive to force as many streams into such structures as possible to avoid regulation of the altered reach or the natural stream above it. Excluding waters flowing through man-made conveyances is of particular concern because under the Corps' 404 Nationwide 43 general permit, no special permission is required for discharges that cause the loss of less than 300 linear feet of an intermittent stream bed, such as putting streams underground in pipes, culverts, or concrete channels (U.S. Army Corps of Engineers 2002).

Second, while the physical and biological damage caused by such extreme alterations to natural streams are severe, having a portion of a stream altered in this fashion does not eliminate all functions and values provided by the entire connected stream system. Water flow, organic material, and organisms all continue to pass through these conveyances downstream, and in some instances, upstream. (Note: in some cases culverts, pipes and ditches make passage impossible for fish and other organisms, or exposes them to altered temperature, oxygen and other chemical states, and higher-than-normal predation.)

Numerous courts have held that manmade waterways are waters of the United States subject to the Clean Water Act. *See, e.g., Community Association For Restoration of the Environment v. Henry Bosma Dairy*, 305 F.3d 953 (9th Cir. 2002) (holding that ditches carrying liquid waste from a CAFO constitute a point source); *Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 534 (9th Cir. 2001) (irrigation district required to secure permit coverage to discharge pollutants to its irrigation canals). In *Talent Irrigation*, the Ninth Circuit explained that the canal was a water of the United States despite the fact that the defendant apparently had the ability to isolate the canal in question, and that it flowed only periodically to other waterways. 243 F.3d at 534. Other circuits are in accord. *See United States v. Eidson*, 108 F.3d 1336, 1342 (11th Cir. 1997) (holding that a drainage ditch connected to a sewer drain and running into a canal eventually leading to Tampa Bay was a "water of the United States"); *United States v. Texas Pipe Line Co.*, 611 F.2d. 345, 347 (10th Cir, 1979) (oil spill into tributary involved "waters of the United States," "even though there was no evidence that streams that connected the tributary with navigable waters were running at time of spill"); *United States v. Ashland Oil and Transp. Co.*, 504 F.2d 1317, 1329 (6th Cir. 1974) (to establish a violation of the Clean Water Act it is enough to show that defendant discharged pollutants into a tributary that is "water of the United States;" there is no threshold requirement to prove "that, in fact, the [pollutant] reached and polluted the navigable river.").

B. WETLANDS ARE NOT ISOLATED FROM OTHER WATERS

Wetlands perform their myriad of beneficial functions in ways that are functionally inseparable from all of the other chemical, physical and biological processes that take place within watersheds. Meyer *et al.* (In preparation) provide a useful description of the connectivity of wetlands:

> "Wetlands are arrayed along a continuum of hydrologic connectivity, and distinctions amongst degree of isolation of wetlands are similarly arbitrary...Whether considering riparian wetlands adjacent to a river or depressional wetlands connected to other water bodies only via underground pathways, their roles of recharging groundwater, improving water quality,

> and providing critical habitat are essential to the physical, chemical and biotic integrity of our nation's waters."

1. Wetlands Are Connected to Other Waters Through Hydrology and Chemical Processes

   a. Surface and groundwater interaction

Surface water in wetlands interacts with groundwater flowing near and through the wetland. Chemical transformation of water flowing through wetlands is partially a function of the amount of contact time in the surface and groundwater interaction. As noted by Winter *et al.* (1998):

> "Ground-water chemistry and surface-water chemistry cannot be dealt with separately where surface and subsurface flow systems interact. The movement of water provides a major pathway for chemical transfer between terrestrial and aquatic systems. This transfer of chemicals affects the supply of carbon, oxygen, nutrients such as nitrogen and phosphorus, and other chemical constituents that enhance biogeochemical processes on both sides of the interface. This transfer can ultimately affect the biological and chemical characteristics of aquatic systems downstream."

Examples of Surface and Groundwater Interactions in Certain Wetland Types

Fens - The interaction of surface and groundwater is substantial and immediate and relatively constant in wetlands such as fens, as these systems are defined by the characteristic of groundwater discharging at or near the surface and seeping continuously through the root zone of the vegetation. A comprehensive analysis of the abundance, distribution, and ecological characteristics and significance of these unique systems by Bedford and Godwin (In press), "Fens of the United States: Distribution, Characteristics, and Scientific Connection versus Legal Isolation," provides an important contribution to the understanding of these wetlands. As the authors demonstrate, "the hydrogeologic settings in which fens occur, always where groundwater discharges to the surface, guarantee their strong influence on the physical and chemical properties of surface water." Fens occur in diverse topographic and geologic settings where climate allows the soil surface to remain saturated by groundwater discharge. Fens are nutrient-poor, with high concentrations of calcium, iron or aluminum in the soil and water, elements which provide the capacity for adsorption of phosphorus from groundwater inflows. And the high carbon content in the soil creates the potential for denitrification. Bedford and Godwin (In press) cite one study (Drexler *et al.* 1999a) of a New York fen which showed significant nitrate removal from groundwater entering the fen below adjacent cropland.

Fens also modulate the temperature of groundwater as it discharges, cooling subsurface flows to streams in summer and warming them in winter. Where the groundwater discharge from fens is persistent and strong, it serves an important water quality function by contributing inflows to cold-water, low-nutrient streams, required by trout species (Meyer *et al.* In preparation).

The physical and chemical properties of fens allow them to support a uniquely high biological diversity, especially of plant species. Bedford and Godwin (In press) note that the degree of hydrologic connectivity of fens strikes a delicate balance:

> "In a landscape context, the functional characteristics and significance of fens depend oddly on both their isolation from and connection to other waters. While their biological diversity is controlled in large part by their connection to ground water flows and to the chemistry of ground water (Almendinger and Leete 1998b, Drexler *et al.* 1999b), it also depends in part on a kind of isolation from other surface waters, i.e. on an environment that is usually saturated by ground water but seldom flooded by nearby surface waters (Stewart *et al.* 1993, Amon *et al.* 2002). Nutrient loads would be higher, thus promoting production of higher biomass and probably reducing species diversity (Grace 1999). Regular flooding also would eliminate many plant species intolerant of such conditions, thus further reducing species diversity."

Bogs - The montane bogs and depressional wetlands and associated ephemeral streams of Hawaii's volcanic islands are another example of more immediate groundwater-surface water connectivity. Surface water infiltrates readily through these systems and is discharged down-gradient into springs and streams, in turn discharging to ocean waters (U.S. FWS 2003).

Potholes - Prairie potholes vary widely in their hydrologic processes, depending on topographic as well as other factors. The tendency for up-gradient potholes to provide subsurface discharge to lower-gradient potholes has been well-documented. Surface water interaction with groundwater has also been shown to involve flows in both directions concurrently.

Subsurface connection can occur on a periodic basis when groundwater tables are high as a result of seasonally high precipitation. Depressional wetlands of South Carolina's Coastal Plain, including Pocosins, Carolina bays, cypress and gum ponds, and bottomland hardwoods, are all hydrologically linked for some periods of the year when the groundwater table reaches to a foot below the soil surface (Rob Mikell, South Carolina Coastal Program, personal communication, April 2003).

b. Surface overflow

All wetlands interact with the surrounding landscape and other waters, to some degree, as a result of surface overflow from precipitation and stormwater runoff. As Winter *et al.* (1998) observe, the chemical composition of water exchanged by wetlands with their surroundings is in part a function of the frequency and magnitude of the exchange, which is in turn determined by the presence or absence of a direct stream connection.

> "The magnitude of surface-water inflow and outflow also affects the retention of nutrients in wetlands. If lakes or wetlands have no stream outflow, retention of chemicals is high. The tendency to retain nutrients usually is less in wetlands that are flushed substantially by through-flow of surface water. In general, as surface-water inputs increase, wetlands vary from those that strongly retain nutrients to those that both

> import and export large amounts of nutrients. Furthermore, wetlands commonly have a significant role in altering the chemical form of dissolved constituents. For example, wetlands that have throughflow of surface water tend to retain the chemically oxidized forms and release the chemically reduced forms of metals and nutrients."

The frequency and magnitude of surface overflows varies according to wetland type, but also as a function of landscape position. As Meyer *et al.* (in preparation) note, depressional wetlands, even in close proximity, can have distinctly different hydrologic conditions. The frequency and magnitude of overflows from prairie potholes are intimately related to their individual landscape positioning. While prairie potholes normally store some portion of inflows from precipitation and groundwater, at some their storage capacity is exceeded and they overflow. When overflows occur, potholes connect with each other and with nearby streams during flood events. Intermittent surface-water connections between prairie potholes during flooding events have been documented, as summarized in a recent study by Leibowitz and Vining (2003), which explores the connectivity of prairie potholes within a complex by analyzing the evidence of intermittent spillover from one to another. The authors note that intermittent overflows from potholes are an indication that wetter conditions are exceeding the normal storage capacity of the pothole. The study used the testing of conductance in nearby pothole wetlands to measure the dynamics and timing of the flooding-induced spillover from the higher-gradient pothole to the lower one within a pothole complex. The authors also conducted a spatial analysis showing that an estimated 28 percent of the pothole wetlands within the study region in central North Dakota were intermittently hydrologically connected by surface-water to at least one other pothole during a period of flooding in the subsequent year. The connectivity the authors observed is associated with wetter conditions in a 20-year wet-dry cycle in the region. As a result, surface-water connections between potholes should be considered a probability event occurring over time and space. In addition, Leibowitz and Vining (2003) suggest that temporary, infrequent connectivity could provide a mechanism for the dispersal of organisms, potentially supporting metapopulations.

Overflows connecting waters of depressional wetlands to other surface waters occur in a wide variety of wetland systems, landscape positions and ecoregional contexts. The oxbows of many river systems, such as the Southern Platte River in Colorado and Nebraska and Alaska's Yukon River, are periodically linked directly to the river system by floodwaters.

The pocosins and Carolina bays of the southeastern Coastal Plain, while apparently "isolated" wetlands, are hydrologically connected by surface overflows and higher groundwater tables during precipitation events. In a recent summary of findings regarding the ecosystem functions of pocosins, Richardson (In press) describes them as "the headwaters of large areas of Coastal Plain and are a source of sheet flow for the region." Pocosins are connected also by groundwater linkages, and form part of a wetland-lake-stream-coastal estuary system (Richardson In press, citing Daniels, 1981).

Hydrologically, headwater wetlands behave differently from depressional systems. Headwater wetlands are the temporarily or seasonally flooded wetlands occuring where groundwater surfaces to form the head of a stream. Headwater wetlands, unlike depressional wetlands, are open, hydrologically, which results in chemical transformation processes that are more influenced by minerals in the subsoil than by organic matter, and that generally involve less retention of chemical inputs such as nutrients.

2. Wetlands Are Connected to Other Waters Through Biological Connectivity and The Metapopulation Dynamics of Various Species

Temporary wetlands, whether or not they have a surface connection to other flowing waters, provide critical support for the biodiversity of the nation's birds, fish, wildlife and plant species.

In many instances, and on different scales, the role of small, temporary wetlands in providing biodiversity support must be considered as part of a highly productive complex of wetlands distributed in close proximity at a high density. The large and highly productive wetlands complexes of the Central Flyway -- most prominently, the Prairie Pothole Region, the Playa Lakes Region and the Rainwater Basin -- can themselves be seen as biologically connected, supporting different life stages of migrating birds.

Many apparently "isolated" wetlands function on a smaller scale as components of "wetland mosaics" which, as a system, sustain multiple local populations, or metapopulations, of wetland-dependent species. Research on metapopulations of amphibian, herpetofaunal and other species, by Semlitsch and Bodie (1998) and Gibbs (2000), and others has demonstrated how the regional survival of a metapopulation of a wetland-dependent species depends on the abundance and proximity of small wetlands, rather than on any size threshold of the wetlands. Viability of metapopulations is related to the ability to repopulate an area and to recruit juveniles into the breeding population.

Studies have also shown that a diversity of hydrologic conditions within a complex of wetlands positively influences the biological diversity of wetland dependent species. A recent study by Whiles (1998) of amphibian communities within a network of sloughs near a portion of Nebraska's central Platte River found smaller species of frogs more successful in the more intermittent and fishless of the sites, but recruitment did not occur to these sloughs in a drier year.

Significant research in recent years has documented the metapopulation dynamics of specific species. The following species profiles of the Copperbelly watersnake, the Blanding's turtle, the Spotted turtle, and bird species provide examples of the biological connection of temporary wetlands with each other and other surface waters in supporting populations of these organisms.

Examples of Biological Connectivity and Metapopulation Dynamics for Specific Wetland Species

Copperbelly Water Snake, *Nerodia erythrogaster neglectar*

The Copperbelly Water Snake is a highly vagile species with a life history requiring frequent among-wetland movements, use of multiple wetlands, and a reliance on surrounding upland habitats for significant portions of the year:

> Movements to multiple wetlands are an important component of the biology of this species. Movements are important for meeting the more immediate needs of feeding, mating, and refugia. Movements or dispersal to other wetlands allows the copperbelly to respond to changing environmental conditions such as changing water levels, shifts in prey abundance associated with drying wetlands, predation, desiccation, and heat stress.

Small wetlands are important to copperbellies as foraging sites. Copperbellies tend to predominantly eat amphibians, especially frogs. Fish-free wetlands such as "isolated" and ephemeral wetlands are where most species of frog experience their greatest reproductive success. The fact that they dry down over time makes them attractive foraging sites for the snakes.

Small wetlands are also important as stopovers for travel to more distant wetlands. In recent study by Roe et. al. (2002), 80% of all wetland movements by copperbellies in their study were to wetlands less than one ha in size. Also, nearly 70% of their study animals used four or more wetlands, and approximately 50% used five or more wetlands. Loss of small wetlands would reduce the number of wetlands available to the copperbelly, thus reducing available resources, and would consequently reduce population densities.

Since copperbellies rely on movements among wetlands, they would be less likely to persist in remnant low-wetland density landscapes. Loss of wetlands would increase distances between remaining wetlands. This would result in a decrease in the likelihood of successful dispersal or migration due to the increasing distance between resources.

Movement between "isolated" and navigable waters is routine. In both river floodplain habitats and in more upland environments involving "perched" depressional wetlands, copperbellies regularly travel between different types of wetlands. By their day-to-day activities, they link wetlands biologically that may or may not have navigable connectivity.

The copperbelly's propensity to use multiple wetlands and to frequently move between them leads to a susceptibility to changes in the spatial distribution of wetlands. Individual copperbellies may be either forced to confine movements to fewer wetlands and smaller areas if neighboring wetlands become too distant. Also, they may attempt to continue movement among wetlands at considerable costs. Continuing to move among multiple wetlands after wetland losses would likely require snakes to move more extensive distances and enlarge their area use (e. g. Home Range), both of which may increase individuals susceptibility to predation, increase energy expenditure, decrease time for other activities, such as feeding, thermoregulating, and mating, all of which may directly or indirectly influence the individual's survival and fitness as well as long-term persistence of the population. Restricting to smaller sites may come with exclusion from important resources such as foraging sites, or alteration of metapopulation dynamics through isolation.

Blanding's Turtle, *Emydoidea Blandingii*

The Blanding's turtle utilizes a wide variety of habitats throughout its range, but has an affinity for wetland (marshes and shallow ponds) complexes and their surrounding upland habitats. These wetlands may be isolated areas, dependent on seasonal precipitation, or they may be directly supported from nearby river and stream systems:

Utilization of multiple wetlands is an important component of Blanding's turtle biology and has been documented in many studies (Rowe 1987, Ross 1989, Rowe and Moll 1991, Pappas and Brecke 1992, Graham and Butler 1993, Hermann *et al.* 1994, Dorff 1995, Joyal 1996, Linck and Moriarty 1997, Barlow 1999, Kingsbury 1999, Piepgras and Lang 2000, Joyal *et al.* 2001). Multiple wetlands are utilized by Blanding's turtles to fulfill basic requirements such as basking, feeding, aestivation, breeding, and overwintering (Graham and Butler 1993, Joyal 1996, Pappas and Brecke 1992, Dorff 1995, Linck and Moriarty 1997, Herman et al 1994).

Blanding's turtles are a highly vagile turtle species, perhaps the most vagile in North America. Blanding's turtles appear to move longer distances and more frequently than other species (Congdon *et al.* 1983, Piepgras and Lang 2000). Extensive terrestrial movements in turtles have been attributed to reproductive tactics (Morreale *et al.* 1984, Congdon *et al.* 1983, Link *et al.* 1989, Rowe and Moll 1991, Butler and Graham 1995, Joyal 1996, Linck and Moriarty 1997, Piepgras and Lang 2000), thermoregulation (Sajwaj and Lang 2000), aestivation (Joyal 1996, Rowe 1987), searching for nesting sites (Congdon *et al.* 1983) or hibernation sites (Sexton 1959), responses to droughts (Gibbons et al 1983), and to an increase in foraging opportunities (Pluto and Bellis 1988).

Shallow, stable wetlands are integral to the survival of Blanding's turtles, especially amongst the juvenile age class. Juveniles are most closely associated with extremely shallow water, typically less than 10 cm (4"), such as wet meadows. This has been documented for Blanding's turtles and other turtle species as well (Pappas and Brecke 1992, Hammer 1969, Waters 1974, Moll and Legler 1971, Congdon *et al.* 1992).

Over the season, and over their lifetimes, Blanding's turtles use a variety of water depths, thus to sustain the species, an area must have diverse wetlands. In their day-to-day activities, adult Blanding's turtles display flexibility in wetland utilization, using a variety of types, with varying associated depths. However, overall, wetland use is largely dependent on age class. As just mentioned, the smallest turtles use extremely shallow water. However, there is a positive correlation between turtle size and average foraging depth, such that the largest individuals use water that averages about 50 cm in depth, like shallow ponds and streams (Kingsbury 1999, Barlow 1999). All age classes are also dependent on shallow areas for hibernation.

Blanding's turtles utilize "isolated" wetlands. Several studies have noted the importance of widely spaced vernal pools, and both small ephemeral wetlands and permanent wetlands as basking, feeding, aestivating and overwintering sites (Graham and Butler 1993, Joyal 1996, Pappas and Brecke 1992, Dorff 1995, Linck and Moriarty 1997, Herman et al 1994). Joyal *et al.* (2001) noted that the Blanding's turtles in her study frequently used small wetlands, often less than 0.04ha in size, as foraging and thermoregulation sites.

Due to the Blanding's turtle's reliance on multiple wetlands, their frequent movements between them, and their high degree of site fidelity, changes to the spatial distribution of wetlands utilized by Blanding's turtles may threaten existing populations. A single population of Blanding's turtles is frequently spread over multiple wetlands of many different types, and movements between these wetlands are common (Ross 1989, Rowe and Moll 1991, Joyal 1996, Joyal et al 2001). Blanding's turtles also display site fidelity (Gibbons 1968, Rowe 1987, Barlow 1999). This means that they often follow the same patterns of movement year after year and they may also return to the same wetlands to hibernate, and to the same nesting areas (Congdon et al 1983, Barlow 1999, Standing et al 1999, Lang 2002). Disruptions to hibernation, and nesting areas would seriously impact a population. Physical barriers, such as large tracts of land between wetlands, which may come about after smaller connecting wetlands are removed, may inhibit the movements of turtles (Rowe 1987). Movements may then be restricted to smaller areas, with fewer resources, or they may be continued with higher costs and risks. Decreased movements may also impede gene flow between adjacent populations (Kiester et al 1982).

Spotted Turtle, *Clemmys guttata*

Spotted turtles display a high affinity for shallow wetland complexes and surrounding upland habitats throughout its range. Multiple wetland use is common. Numerous studies have documented the movements of spotted turtles between multiple wetlands (eg. Ernst 1976, Lovich 1990, Graham 1995, Joyal 1996, Barlow 1999). These movements can be both aquatic and/or overland and can be quite extensive. Such movements in turtles have been documented to be important for reproductive tactics (Morreale et al 1984), searching for nesting sites (Congdon et al 1983) or hibernation sites (Sexton 1959), responses to droughts (Gibbons et al 1983), and to increase foraging opportunities (Pluto and Bellis 1988). Kiester et al (1982) has also suggested that large movements by male turtles would promote gene flow between adjacent populations.

Shallow heterogenous wetland complexes, as well as small "isolated" wetlands are important habitat for spotted turtles. Across part of their range, spotted turtles utilize shallow, heterogenous wetland complexes (Capler and Moll 1988, McGee et al 1989, Barlow 1999), which may exist in close association with river or stream systems (Ernst 1976, Barlow 1999). In other parts of their range, spotted turtles utilize small "isolated" wetlands such as vernal pools, and ponds (Creighton and Graham 1993, Graham 1995, Joyal 1996). Regardless of their range, spotted turtles require shallow wetlands (<50cm deep) for all or part of their lives (Barlow 1999).

Small "isolated" wetlands and non-"isolated" wetlands are frequently used. Seasonal movements between "isolated" and non-"isolated" wetlands have been documented by Ward *et al.* (1976), Graham (1995), and Joyal (1996). These seasonal movements are important behavioral adaptations for thermoregulation, foraging, and the avoidance of desiccation and predators. During these seasonal movements spotted turtles may utilize flooded areas in fields and woods, marshes, decaying vegetation in wooded areas, as well as shallow wetlands and vernal pools.

Upland habitats are vitally important. Spotted turtles aestivate in terrestrial locations, often well away from wetlands (Creighton and Graham 1995, Graham 1995, Barlow 1999). They also frequently use these upland habitats as movement corridors, and nesting sites.

Bird Species

Wetlands are important for numerous bird species. Numerous species, notably migratory species, provide excellent examples of the interconnectivity of wetlands, both within complexes, and those distant from one another in the landscape. Numerous and diverse wetlands, both interconnected and otherwise, are important for bird diversity.

Many species, including the shorebirds, wading birds, and waterfowl like ducks and geese, make use of multiple wetlands, which may be quite spatially dispersed (Haig *et al.* 1998, Naugle *et al.* 2001). Wetlands are used as foraging sites, resting areas during migration, and in some cases nesting sites (Skagen and Knopf 1994, Naugle *et al.* 2000, Naugle *et al.* 2001). For example, black terns are documented to nest and forage in prairie wetlands (Naugle *et al.* 2000).

Heterogenous wetland complexes, that support multiple wetlands of various sizes, provide more suitable habitat, both for nesting and foraging (Gibbs 1991, Naugle *et al.* 2000, Naugle *et al.* 2001), when compared to "isolated" wetlands. Because wetlands, and wetland complexes in particular are so variable (both in structure and in vegetative components), they are attractive for many different species of birds (Naugle *et al.* 2000, Naugle *et al.* 2001), and generally support greater species richness (Brown and Dinsmore 1986). Birds are able to exploit the available habitat and capitalize on the multiple foraging opportunities, while reducing energy expenditure (Naugle *et al.* 2001).

Heterogenous wetland landscapes provide alternative habitat when adverse conditions arise at one site, for example during periods of flooding, or drought (Skagen and Knopf 1994, Haig *et al.* 1998). Plissner and Haig (1997, discussed in Haig et al 1998) provide an excellent example to highlight this point in which populations of Piping plovers were observed to relocate to more suitable habitat provided by nearby wetlands after flooding occurred on habitats they were utilizing along the Missouri River.

Small seasonal wetlands within areas that support high wetland densities are also important. These temporary wetlands provide foraging, as well as nesting habitat for many highly vagile migrating species. For example, Northern Pintails are particularly at risk from the loss of small seasonal wetlands as they depend on these habitats for breeding before moving their broods to more permanent, larger wetland habitats (Naugle et. al 2001). Interestingly, Naugle *et al.* (2001) also found that the suitability of larger wetlands (for providing suitable habitat, especially for species such as the Northern Pintail) decreased when the smaller wetlands surrounding them were removed.

Connectivity between wetland habitats is paramount. Within-season movements among numerous sites are important, especially for many species of waterbirds (Haig *et al.* 1998). Movements among breeding areas have been documented to enhance reproductive success by providing an opportunity to assess nesting territory and feeding-area quality in current and future years (Haig *et al.* 1998). Maintaining connectivity between wetland complexes will also provide vital linkages between breeding areas and breeding populations. Wetland availability in the greater landscape context will also determine its "usability," with less isolated complexes being more likely to be used than more isolated complexes (Naugle *et al.* 2001).

Additional families or pathways -- In their recent article on intermittent hydrologic connectivity among prairie potholes, Leibowitz and Vining comment on the fact that research into metapopulation dynamics has, thus far, tended to address movements of species between wetlands either over land or in flight. The authors suggest that flooding-induced, intermittent surface-water connections between potholes, and between other depressional wetlands, may serve as a mechanism for individuals of a species to migrate. They cite a recent study of wetlands in Florida (Babbitt and Tanner 2000, cited in Leibowitz and Vining) which found that temporary, surface-water connections between wetlands and drainage ditches, resulting from flooding conditions, caused an increase in the relative abundance of amphibians adapted to fish predation.

V. FUNCTIONS AND VALUES OF HEADWATER STREAMS AND THEIR ADJACENT WETLANDS AND NON-ADJACENT WETLANDS

Above, we describe the many linkages between headwater streams and so-called "isolated" wetlands to other waters. However, the waters described also have inherent value in the unique functions they provide – functions that establish such waters as integral and inseparable features of the landscape. An examination of these functions will not only further establish the connectivity of these waters to other waters, but also provide a compelling case for continuing to protect them under the Clean Water Act.

The major ecological functions of headwater streams and small, apparently "isolated" wetlands and other waters, are described below. The following discussion responds to the invitation in the ANPR to address "the functions and values of wetlands and other waters;" it summarizes the critically important services provided by these waters, and concludes by outlining the serious potential consequences of narrowing federal protection for them.

A. THE INTRINSIC VALUE OF HEADWATER STREAMS

Headwater streams make up the vast majority of the entire stream network, and are inseparably bound up with other waters in the surrounding watershed and downstream. They provide essential functions and values themselves, and are critical to the hydrological, chemical, and biological health and integrity of downstream waters. As U.S. EPA's own recently-released research and literature review on headwaters streams states emphatically:

Headwater streams make up the majority of our stream resource. Although it is difficult to get reliable estimates of perennial, intermittent and ephemeral stream lengths, the case studies that are available indicate the proportion of the total stream length that could be intermittent, even in more humid regions, is significant (a range of 17 to 34%). The extent of ephemeral headwater streams is even larger (a range of 22 to 55%). We should be very wary of any attempt to downgrade the value or importance of headwater streams, especially as they relate to the aquatic life use in these streams and the role these headwater streams play in the overall stream network. Doing so would put the majority of our freshwater aquatic stream resource at risk, as well as severely limiting our ability to protect downstream waters (U.S. EPA 2003).

1. Streams Can Be Defined in Several Ways

There are generally accepted definitions for small streams, and some measurements of their extent, although no single definitive or accurate data set exists of headwaters streams (Meyer and Wallace 2001). Generally accepted definitions of the term *headwaters* refer to the smallest streams in the network and, in particular, the source(s) of a river. They may include ephemeral streams, those that flow at the surface only periodically and usually in response to a specific rainfall event. Headwaters may also include intermittent streams, those that have flow several months in an average year. Such streams are distinguished from perennial streams, which flow at all times of the year (Meyer *et al.* In preparation). Some hydrologists use the term zero-order streams to refer to swales or unchannelized hollows. These waters are important conduits of water, sediment, nutrients and other materials during rain and snowmelt events, but are not considered to be stream channels because they lack distinct stream banks (Meyer *et al.* In preparation). Other states employ various definitions for ephemeral, intermittent, and perennial streams that include parameters other than hydrology. For example, Pennsylvania considers a stream "perennial" if it supports two aquatic macroinvertebrate taxa, regardless of whether there is continuous surface flow (U.S. EPA 2003).

Stream order is another way of classifying streams by relative size of channels in the stream network. In the stream order system, first order streams are the smallest identifiable channels having no tributary branches. Second order streams are formed where two first-order channels merge, third order streams are formed by the combination of second-order streams, and so on (Horton 1945, as cited in Meyer *et al.* In preparation). Scientists generally agree with these definitions, however, some resource management agencies have developed their own definitions. For example, Ohio EPA considers headwaters streams to be "the very small swales, creeks, and streams that are the origin of most rivers." And it defines "primary headwater" streams as those with watersheds of less than one square mile (Ohio EPA 2001).

2. Headwater Streams Perform Ecosystem Functions

Headwaters streams provide a wide array of functions and environmental services whose value, though estimated to be enormous, to date cannot even be fully calculated. The Ohio Environmental Protection Agency's (2001) fact sheet on headwaters streams notes the value of these small systems:

> Because of their small size, headwater streams in some locations have been treated as mere water "conveyances" and have been ditched, channelized, moved or even buried in pipes. Historically they have not been appreciated for their contribution to water quality. By their sheer numbers, however, they have important ecological and economic functions. They affect the ecological and economic viability of downstream rivers through the regulation of flood waters, the maintenance of safe and high quality drinking water, pollution prevention, and numerous other ecosystem services.

The major ecosystem functions of headwater streams are described briefly below. This discussion augments the characterization of the processes, characteristics and functions of headwater streams described above.

a. Flood control and maintenance of water supplies

During heavy precipitation and floods, water soaks into floodplains, stream channel beds and banks, and into groundwater tables. This transfer of water into "storage" significantly delays and diminishes flood peaks. During dry periods, release of this stored water along with groundwater seepage ensures a steady flow of water, or "baseflow," in the channel and downstream. (Meyer *et al.* In preparation) Streams receive, on average, 50 percent of their flow from groundwater (Alley *et al.* 1999), and headwater streams are a primary point of groundwater discharge into surface waters, particularly during dry and other low flow periods. (Cohen 2003)

b. Sediment storage

Headwater streams provide the connection between sediment production from hill slopes and sediment transport to larger streams, rivers, lakes, ponds, and coastal waters. Thus, they are the first line of defense against high sediment loads in large streams and rivers. These excess sediment loads damage aquatic wildlife habitat and degrade human uses of water – for drinking water supplies, fishing, and recreation. Headwaters are highly effective in capturing and filtering out sediments, as well as organic material and excess nutrients. (Meyer *et al.* In preparation)

c. Maintaining water quality through nutrient uptake and transformation

The basic chemical composition of unpolluted streams and rivers is largely established in headwater streams. Recent research has demonstrated that small streams are the sites of the most active uptake, transformation, and retention of nutrients. In addition to the nutrient removal that occurs in headwater streams, the chemical and biological transformations that occur there (e.g. denitrification, microbial uptake, transformation to organic nitrogen) reduce the biological availability of nutrients that are exported downstream. This capacity for nutrient retention and transformation reduces the loading of nutrients to downstream ecosystems. Riparian forests and wetlands associated with headwater streams can also be efficient in nutrient removal. (Meyer *et al.* In preparation)

3. Streams Provide Wildlife Habitat and Help Maintain Biodiversity

Headwater streams and their riparian zones are regions of high species diversity. Individual headwater streams support hundreds of species from a wide range of biological groups from bacteria to bats. Headwaters serve as the primary habitat for some fish species, but also provide essential support in the form of spawning, nursery, feeding, and thermal refuge areas for fish living in larger streams, rivers, and lakes. Small headwater streams provide essential nutrients to salmon species spawning and nesting downstream; salmonid reproduction occurs even in ephemeral portions of streams in the Pacific Northwest. (Poff *et al.* 1997) Many headwater fish species are rare, declining, or extinct. Amphibians are common in intermittent as well as perennial streams, and are usually more abundant in streams too small or remote to support large predatory fish. Only a few species of birds actually live in small streams, but many depend on headwaters for food, water, habitat, or movement corridors. Headwaters are important habitats for many mammals, which use headwater habitats for shelter, food, drinking water, or movement corridors. (Meyer *et al.* In preparation)

B. INTRINSIC VALUE OF HEADWATER AND "ISOLATED" WETLANDS

1. Headwater and So-called "Isolated" Wetlands Are Important on an Ecosystem Scale

In 1995, National Research Council (NRC) addressed the question of whether headwater and "isolated" wetlands should receive less protection, and found the scientific basis for doing so to be "weak" (NRC 1995). The NRC's conclusion was based on ample evidence that headwater and so-called "isolated" wetlands provide essential ecosystem services to the water environment. The term "isolated," itself, has a weak scientific basis. As noted by Tiner et. al. in the recent USFWS study, *Geographically Isolated Wetlands*, "There is no single, ecologically or scientifically accepted definition of isolated wetland, because this issue is more a matter of perspective than scientific fact." (Tiner *et al.* 2002) Not only are headwater and so-called "isolated" wetlands intrinsically of critical ecological importance, but, as noted above, they function integrally with the chemical, physical and biological processes within watersheds. A full consideration of how headwater and so-called "isolated" wetlands function in the environment underscores the inapplicability of the "isolated" characterization. In addition, contributions to the understanding of the complex functioning of headwater and so-called "isolated" wetlands since the NRC study was published underscore the NRC's conclusion regarding their relative importance for conservation.

The ecosystem services provided by wetlands, including headwater and so-called "isolated" wetlands, are essentially grouped as hydrologic, biogeochemical, and habitat functions.

2. Headwater and So-called "Isolated" Wetlands Perform Specific Functions

a. Hydrology

Irrespective of their landscape position or degree of connectivity to other surface waters, wetlands perform hydrologic and water quality functions by "modifying or controlling the quality and quantity of water moving through the wetland," as described by Carter (1996). The hydrologic and water quality functions of wetlands, including headwater and so-called "isolated" wetlands, are complex and varied, and are dependent on a range of factors, including:

Landscape position
Topographic location
Presence or absence of vegetation
Type of vegetation
Type of soil
The relative amounts of water flowing in and out of the wetland
Local climate
The hydrogeologic framework
The geochemistry of surface and ground water

The hydrologic functions performed by wetlands, which vary according to the above factors, include: flood storage and moderation of storm flows; groundwater recharge and discharge, including discharge to stream flows; alterations of precipitation and evaporation; maintenance of water quality and estuarine balance; and reduction in erosion.

The complexity of differentiating between different types of freshwater wetland systems according to their ecological functions and regimes is addressed by Misch and Gosselink (1993). In categorizing the ecosystem functions of freshwater, non-forested wetlands, the authors differentiate between peat-forming systems, such as bogs and fens, and freshwater marshes which are non-peat-forming. Included in the category of freshwater marshes are smaller systems such as riverine marshes in floodplain and headwater areas, prairie potholes and sandhill marshes, vernal pools and playa lakes, along with larger systems including the marshes fringing the Great Lakes and the Everglades. Misch and Gosselink note that "[T]he critical factors that determine the character of these wetlands are the presence of excess water and sources of water other than direct precipitation." Marshes, the authors note, are like fens, in that "they generally have a water source in addition to precipitation," those potential sources being groundwater and surface flows. In addition, because all water sources to freshwater marshes are dependent on precipitation, their water regimes can vary greatly over time. In their landmark study of the pothole region, Stewart and Kantrud (1971) showed that precipitation patterns can alter prairie potholes from ephemeral to seasonally ponded to permanently ponded conditions over a period of years (cited, e.g., in Hubbard 1988).

The degree to which wetlands perform the above-mentioned hydrologic functions varies from wetland to wetland, especially in the case of depressional wetlands, which show a high degree of beta diversity, or variation from one to another. For example, as described by Meyer et. al.

(2003), two prairie pothole wetlands in central Wisconsin, located 400 m apart, are distinctly different hydrologically as well as biologically.

Depressional wetlands generally, and particularly those lacking "natural outlets," or surface connections to other waters, typically intercept and store runoff, and moderate the velocity and volume of floodwaters. (Carter 1996) As noted by Tiner et. al. (2002), in areas where "isolated" wetlands are present in the thousands, the capacity to store surface water can be "enormous."

The strong correlation between the size of flood peaks and the amount of storage capacity provided by wetlands and lakes is well documented. (Carter 1996) The classic study of the Devil's Lake basin in North Dakota, by Ludden et. al. (1983) found that prairie potholes can store as much as 72 percent of the total runoff from a 2-year storm event and 41 percent of the runoff from a storm that occurs once every 100 years (cited in Tiner *et al.* 2002) Similarly, an Illinois study found that increasing the amount of wetland storage area in a basin by 1 percent decreased both peak and total flood flows and increased low flows. (Demissie, 1993 cited in Levin 2002) Additional studies have shown the critical floodwater collection and storage function played by the playa lakes of the Southern High Plains. (Haukos. In preparation) Pocosins are also recognized as "significant water storage systems," which receive and slowly release precipitation and stormwater runoff to downstream freshwater and estuarine waters. (Richardson. In preparation)

Water stored temporarily, seasonally and permanently in wetlands provides an important source of water to bird, fish and wildlife (Tiner *et al.* 2002).

Some portion of the water collected and stored by freshwater wetlands, including marshes and bogs, is typically discharged to groundwater where it replenishes aquifers and maintains instream flows. A significant proportion of recharge flows to groundwater can be provided by infiltration from depressional wetlands. Weller (1981), for example, showed that small wetlands contribute significantly to regional groundwater recharge. (cited in Misch and Gosselink 1993)

Groundwater recharge by small wetlands is important to replenishment of regional aquifers in the semi-arid northern prairie region (van der Kamp and Hayashi 1998). Much of the recharge of water to the Ogallala aquifer is provided by the 20,000 to 30,000 playa lakes of the Southern High Plains of West Texas and New Mexico. As Loren Smith describes in a forthcoming publication, *Playas of the Great Plains*, significant scientific debate, now resolved, surrounded the question of whether the impermeable clay soils lining playas, and the underlying layer of caliche, a dense geological formation, could allow infiltration. Subsequent research by Nativ and Riggio (1989) and Zartman et. al. (1994, 1996) has established conclusively not only that focused recharge from the playa lakes, rather than more diffuse infiltration from the surrounding landscape, recharges to the groundwater, but also that in the Southern High Plains, playas represent the sole source of recharge to the Ogallala. More recent studies of other depressional systems have shown that infiltration of surface waters occurs primarily through the permeable soils around the edges of depressional wetlands and that the ratio of the edge to the wetland volume tends to determine the amount of infiltration. (Misch and Gosselink 1993) Contributions to recharge have been documented in several other regions. The cypress domes of Florida have also been shown to contribute to aquifer recharge. (Carter 1996) Phillips and Shedlock (1993) documented the role of Delmarva bays in collecting and storing water from precipitation during the winter and spring, as well as stormflows from surrounding uplands, and recharging it to the aquifer. (cited in USFWS comments to DOI 2003) The Montane bogs and other depressional wetlands of Hawaii are also recognized as providing aquifer recharge. (USFWS comments to DOI 2003)

In addition to recharging aquifers, water infiltrating to groundwater through depressional wetlands flows down-gradient to streams. Headwater and so-called "isolated" wetlands can play a significant role in maintaining baseflows in streams. Delmarva bays, for example, help to maintain baseflows through recharging groundwater. Drainage or filling of wetlands that provide groundwater recharge can result in reductions in baseflow of streams, with additional impacts to downstream ecosystems. (Winter 1999)

b. Water quality

Wetlands, including headwater and so-called "isolated" wetlands, perform important water purifying functions that benefit the ecosystem overall. The transformation of chemicals in water inflows is a function of four principal components of the wetland: the substrate or wetland soil, water, vegetation, and microbes (Carter 1996). These components are common to all wetlands.

As noted earlier, wetlands trap, transform, and recycle the chemical constituents in water inflows through biological and chemical processes (Winter 1998). Many wetlands serve as nutrient sinks, removing nutrients, from inflows and recycling them through plant uptake or biological processing. Misch and Gosselink (1993) provide a review of findings over the 1970-1992 period concerning various wetland types and their roles as sources and sinks of nutrients. They note that inadequate measurement techniques may have affected some of the findings, and observe that the results varied according to whether the study addressed inorganic or organic nutrients. They conclude, with certainty, that "many wetlands act as sinks for particular inorganic nutrients and many are sources of organic material to downstream or adjacent ecosystems."

The National Research Council recognized the value of headwater riparian wetlands in protecting water quality, in their recent study of the effectiveness of wetlands mitigation, *Compensating for Wetland Losses under the Clean Water Act* (2002), noting their effectiveness in buffering streams from influxes of nutrients and sediments. The NRC found that headwater riparian wetlands, to varying degrees depending on morphology and other factors, also remove nutrients from groundwater flows to streams. They cited the characterization by Gilliam *et al.* (1996) of headwater riparian wetlands as "the most important factor controlling nonpoint source pollution in humid areas." The relative importance of riparian wetlands associated with low order streams in removing phosphorus was demonstrated in a 1996 study of eight watersheds. The authors modeled the nutrient load reduction performed by riparian areas, and found that the riparian wetlands of first- through fourth-order streams contributed significantly to phosphorus removal, and the wetlands associated with the first-order streams accounted for most of the total load reduction attributed to wetlands. (Weller1996, cited in Meyer *et al.* In preparation)

Depressional wetlands, including so-called "isolated" wetlands, have been shown to effectively remove pollutants from waters overflowing the wetland or discharging to groundwater. A study by Davis et. al. (1981) measured the levels of nitrogen and phosphorus in influent and effluent to a prairie marsh, and found that all runoff was retained in three dry years, while in the wet year, more than 75% of the inorganic nitrogen was removed from water flowing out of the marsh (cited in Hubbard 1988).

The role of wetlands in trapping sediments and serving as sinks for heavy metals and other chemical constituents is also well established in the literature.[36]

c. Maintain Biodiversity and species populations and distributions

Tiner et.al. (2002) have noted recently, "From an ecological standpoint, isolated wetlands are among the country's most significant biological resources." The biological significance of ephemeral and other apparently "isolated" wetlands is their role in providing the habitat and energy sources that are critical to supporting the abundance and biodiversity of the nation's birds, fish, wildlife and plant populations. In some instances, ephemeral wetlands complement non-"isolated" systems in providing habitat for wetland-dependent species. In other instances, they provide specialized habitat conditions that are required to support regional biodiversity. In certain instances, as Meyer et. al. (In preparation) have described, "ephemeral wetlands contribute to global biodiversity and the disappearance of ephemeral wetlands would mean the loss of highly specialized taxa."

Characterizing the ecological role of apparently "isolated" wetlands, Tiner (2002) observed:

> "In some areas, isolation has led to the evolution of endemic species vital for the conservation of biodiversity. In other cases, their isolation and sheer numbers in a given locality have made these wetlands crucial habitats for amphibian breeding and survival (e.g., woodland vernal pools and cypress domes) or for waterfowl and waterbird breeding (e.g., potholes). In arid and semi-arid regions, many isolated wetlands are veritable oases -- watering places and habitats vital to many wildlife that use them for breeding, feeding and resting, or for their primary residence. Many of these wetlands may be small in size, but their value to wildlife is far greater than their size alone would suggest."

Tiner *et al.* (2002), as well as a recent report by the National Wildlife Federation and the Natural Resources Defense Council *Wetlands at Risk*, profiling wetland types and their wildlife contributions by region, detail the wide diversity and richness of wetlands sometimes classified as "isolated." These systems sustain many species populations, and their distribution, safeguard biodiversity locally, regionally or globally, and serve as the sole line of defense against extinction in a large number of instances.

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[36] See, e.g. Hubbard, Daniel E., *Glaciated Prairie Wetland Functions and Values: A Synthesis of the Literature*, U.S. Fish and Wildlife Service Biological Report 88(43), p. 19.

(1) Maintenance of populations and regional abundance

The roles of some wetland types in supporting wildlife populations, for example duck production of the Prairie Pothole Region and the role of the Rainwater basin and Playa Lakes Region as critical wintering and stopover grounds for a wide range of migratory birds, are well understood and documented. Other systems have received relatively little research attention to date, and in some instances, species populations are being identified even as development threats bear down on the remaining wetlands of the type. An example is the Citronelle Ponds of the Gulf Coast reported in *Wetlands at Risk*. Since that publication, additional species of copepods and fairy shrimp have been identified, along with a potentially unnamed *Streptocephalus* (George Folkerts, personal communication, April, 2003).

Many wetland-dependent species are non-specializing, relying on diverse wetland habitat. For such species, apparently "isolated" wetlands may help to sustain their regional abundance. For example, the Illinois Natural History Survey study conducted in 2002 showed that a sizeable proportion of the wildlife in Illinois is dependent on, or closely associated with wetlands, and that "isolated" wetlands make up 60 percent of the total number of remaining wetlands (Levin *et al.*, 2002). The following are the reported number and percentages of wetland-dependent and associated native species reported:

Group of organisms	Number	% of native species	% threatened /endangered
Plants	862	42	18
Birds	105	38	29
Amphibians	37	90	19
Reptiles	13	22	46
Mammals	6	10	33

The study also reported that amphibians are especially, and in some instances exclusively, dependent on "fish-free isolated wetlands" for survival.

(2) Biodiversity support for specialized species

Biodiversity support by vernal pools, and other seasonal wetlands that may be considered "isolated," occurs on local, regional and global levels.

Ephemeral wetlands provide global biodiversity support to a number of highly specialized families of organisms. (Meyer *et al.*, In preparation) provide a listing of ancient vascular plant and crustacean species, associated with ephemeral wetlands since at least the Tertiary period , that are found on most or all continents. These groups have local species but generally also some individual species that have very wide distributions.

The playa lakes of the Southern High Plains provide regional biodiversity support to a number of families of wildlife species in addition to waterfowl, including mammals, other birds, invertebrates and flora (Haukos, In preparation).

A study by Zedler *et al.* (1993) of plant species found in vernal pools in San Diego County, California illustrates local biodiversity support. Of the 78 vascular plant species found in the study site, 25 are common to the vernal pools and surrounding chaparral, while 25 of the species are unique to vernal pools, and some of those are endemic to the region. As a result, loss of vernal pools in the area would threaten local biodiversity (cited in Meyer *et al.* In preparation). Meyer *et al.* (In preparation) also report that 44, or nearly one-tenth, of the plant species found in California vernal pools are found only in vernal pools and only in California.

Another example of specializing organisms are the very small land snails found in fens. Although not well-studied, about 42 different species of land snails have been found in fens in Iowa, Wisconsin, Minnesota and New York. One of the rarest species is limited to fens, and has been found at only about two dozen sites (Bedford In press).

(3). Profiles of Amphibian Species

The habitat functions of depressional wetlands and their importance for assuring continued survival of dependent species are well-illustrated by amphibians. The following are profiles of amphibians and their use of wetland habitat.

Amphibians are generally slow moving and small-bodied with a physiology that requires them to remain near moist refugia (documented by Larson *et al.* 1984, cited in Gibbs 1998). A majority of them must also use wetlands for breeding. As a result, destruction of wetland habitats have the potential to seriously impact amphibian populations.

Many adult amphibians use aquatic habitats for reproduction, i.e., mating and egg laying. These habitats are also important for the recruitment of juveniles into the adult population. Not only does breeding and egg-laying occur there, but larval (tadpole) development until metamorphosis also typically takes place in these aquatic environs (Duellman and Trueb 1986, Dodd and Cade 1998, Semlitsch 1998). Aquatic habitats may also be very important in affording protection from extreme physical conditions, such as desiccation (Gill 1978).

Breeding habitats are frequently highly specific - breeding will only be successful in aquatic habitats with suitable physical and biological conditions. For example, studies conducted by Karns (1992) on the Blue-spotted salamander (*Ambystoma laterale*), and by Sadinski and Dunson (1992) on Jefferson salamanders (*Ambystoma jeffersonianum*) documented that embryonic development was significantly extended and in some cases failed under low pH conditions. Also, many species of salamanders, especially those that are small bodied or have small clutch sizes, will only breed in aquatic areas that are devoid of fish (Hecnar and M'Closkey 1997, Petranka 1998). Avoidance of ponds containing fish has also been documented with Wood Frogs (*Rana sylvatica*) (Hopey and Petranka 1994). Adult salamanders may also show site fidelity, returning to the same breeding ponds year after year (Gill 1978, Semlitsch *et al.* 1996).

Temporary ponds are important breeding sites for many amphibians and these sites may support a rich diversity of species. Studies supporting these findings include Hecnar and M'Closkey (1996) and Snodgrass *et al.* (2000). Dodd and Cade (1998) also report that there are a number of amphibian species of critical conservation concern that only breed in temporary wetlands: *Ambystoma cingulatum* (Flatwoods salamander), *Notophthalmus perstriatus* (Striped newt), *Rana capito* (Gopher Frog). There are also many other species that are dependent on small wetlands. For example, in a study conducted by Gill (1978) on the Red-spotted newt (*Notophthalmus viridescens*) he found that breeding adults used numerous, small, isolated, woodland ponds whose hydrology was solely dependent on precipitation.

Diversity in the hydroperiod of wetlands within complexes is required to buffer unpredictable environmental variation. Because many amphibian species utilize aquatic habitats with varying hydroperiods, they are greatly influenced by stochastic events, such as droughts. For many species of amphibians, especially those that rely on seasonally ephemeral wetlands, years of drought may result in a reduction of recruitment into the adult population as larvae are unable to complete metamorphosis, or in extreme cases, it may result in an absence of breeding. A long-term study, conducted over 16 years, by Semlitsch *et al.* (1996), found that years with short hydroperiods resulted in complete, or nearly complete amphibian reproductive failure. Their study highlighted the vulnerability of some amphibian species that may be unable to survive multiple years of conditions unfavorable for reproduction. For these species, the authors note that, barring rescue from immigration, they would probably become locally extinct as a direct result of mortality exceeding reproduction.

Terrestrial habitats surrounding breeding sites are important areas for foraging and hibernation. During the non-breeding season, many amphibian species live in the terrestrial habitats that surround breeding sites (Hecnar & M'Closkey 1996, Semlitsch 1998). This surrounding terrestrial habitat provides dispersal corridors for the movement of amphibians between sites. Dispersal between sites is important for many amphibian populations as it provides for genetic exchange, as well as for the recolonization of populations that may have become extinct at distant sites (Semlitsch 1998). Another important point to note is that amphibians have been found to utilize terrestrial habitat at considerable distance from wetlands. For example, Semlitsch (1998) summarized movement data from numerous studies on salamanders and found that of the six species he included in his analysis, adults were found an average of 125.3m from the edge of aquatic habitats, and they may be found up to 625m from wetland edges.

Due to the filling of many vernal pools across the US, many populations of pond-breeding salamanders are becoming ever more "isolated." Petranka (1998, p. 16) speculates that in many areas, salamander populations "...are at the point at which recolonization of ponds following local extinction is becoming increasingly unlikely."

Examples of salamander species that are dependent on aquatic wetland habitats in the US include (the following information is loosely paraphrased from Petranka,1998):

Ringed salamander (*Ambystoma annulatum*). This species breeds in fish-free habitats such as woodland pools, and seasonally ephemeral ponds adjoining forests (Brussock and Brown 1982; McMillian and Wilkinson 1972; Peterson et al 1991; Spotila and Beumer 1970; Trapp 1956). The species also uses pools in low-lying areas as well as along ridge tops, where the hydrology is mostly precipitation dependent.

California Tiger salamander (*Ambystoma californiense*). Generally breeds in fish-free seasonally ephemeral ponds. During years of drought, ponds may not form, and populations may not breed (Barry & Shaffer 1994).

Flatwoods salamander (*Ambystoma cingulatum*). Documented to breed in seasonally ephemeral habitats such as marshy pasture ponds, swamps, and cypress and black gum swamps (Anderson and Williamson 1976, Mecham and Hellman 1952). This species has been identified as an amphibian species of critical conservation concern.

Northwestern salamander (*Ambystoma gracile*). Observed breeding in both permanent and semi-permanent habitats, for example, small shallow ponds to large, deep lakes.

Jefferson salamander (*Ambystoma jeffersonianum*). This species typically breeds in seasonally ephemeral woodland pools and farm ponds, but may also use permanent habitats (Bishop 1941a; Douglas and Monroe 1981). They may also breed in upland ponds on ridges.

Blue-spotted salamander (*Ambystoma laterale*). Blue-spotted salamanders breed in variety of habitats devoid of fish, including pools along lakeshores, springs in pastures, quarry ponds, marshes, both seasonally ephemeral and permanent woodland pools (Anderson and Giacosie 1967; Bleakney 1957; Piersol 1910a; Stille 1954; Van Buskirk and Smith 1991; Weller et al 1978).

Mabee's salamander (*Ambystoma mabeei*). This species prefers habitats devoid of fish including semi-permanent farm ponds, vernal ponds in river bottomlands, Carolina bays and cypress-tupelo ponds in pinewoods.

Long-toed salamander (*Ambystoma macrodactylum*). This species is known to breed in seasonally ephemeral and permanent lakes, ponds, and flooded meadows. A small percentage of individuals may also breed in slowly-moving streams (Beneski *et al.* 1986).

Spotted salamander (*Ambystoma maculatum*). Spotted salamanders normally breed in seasonally ephemeral habitats devoid of fish such as vernal ponds, swamps, roadside ditches, and they may occasionally use permanent ponds (Figiel & Semlitsch 1990; Harris 1984; Husting 1965). Petranka (1998) discusses that woodland vernal pools are the primary breeding sites of spotted salamanders.

Marbled salamander (*Ambystoma opacum*). Although the Marbled salamander is a terrestrial breeder, it nests in dried beds of temporary ponds or along the margins of reduced ponds, and the eggs do not hatch until the pond is flooded.

Mole salamander (*Ambystoma talpoideum*). This species breeds in a wide variety of temporary and permanent habitats, but avoids ponds with large predatory fish. Many local populations have been lost as forests and the seasonally ephemeral wetlands they contain have been destroyed.

Small-mouthed salamander (*Ambystoma texanum*). Small-mouthed salamanders are found in bottomland forests and associated wetlands in or adjoining floodplains. They are known to breed in seasonally ephemeral lentic habitats, including woodland ponds, oxbow ponds, flooded field, prairie ponds, and swamps (Bailey 1943; Petranka 1982a; Ramsey & Forsyth 1950). The species may also occasionally breed in sluggish streams or pools in headwater tributaries. They show a strong affinity for fish-free breeding sites. Many populations have been eliminated and reduced as floodplain forests have been cleared for agriculture.

Tiger salamander (*Ambystoma tigrinum*). Tiger salamanders breed in temporary and permanent ponds (Bishop 1941a; Collins 1981). Populations in southeastern US have been declining due to loss of wetland and surrounding forest habitats.

Three-lined salamander (*Eurycea guttolineata*). The Three-lined salamander breeds in cypress bays, vernal bogs, and bogs, as well as sluggish streams, and seeps (Petranka 1998).

Dwarf salamander (*Eurycea quadridigitata*). The Dwarf salamander is found in coastal plain habitats of the southeastern US. Breeding occurs in woodland pools, seepages, roadside ditches, Carolina bays, as well as other standing bodies of water (Petranka 1998).

Four-toed salamander (*Hemidactylium scutatum*). Four-toed salamanders breed in swamps, bogs, marshes, vernal ponds and other fish-free habitats within forested areas.

Many-lined salamander (*Stereochilus marginatus*). This species breeds in woodland ponds, as well as sluggish streams.

Black-spotted newts (*Notophthalmus meridionalis*). Black-spotted newts inhabit both seasonally ephemeral and permanent habitats across their range.

Striped newt (*Notophthalmus perstriatus*). This species has been observed to breed in the following habitats: small ponds, drainage ditches, and other bodies of standing or sluggish water. Striped newts may also be found in habitats that exist in close association with rivers and streams (Dodd & LaClaire 1995).

Eastern newt (*Notophthalmus viridescens*). Eastern newts are known to breed in permanent and semi-permanent bodies of water, such as lakes, reservoirs, marshes, ditches, and sluggish streams (Bishop 1941a; Gates & Thompson 1982).

Rough-skinned newt (*Taricha granulosa*). This species has been documented to breed in seasonally ephemeral ponds as well as permanent habitats, such as lakes, ditches, sluggish streams (Evenden 1948; Garber and Garber 1978; Stebbins 1951).

Two-toed Amphiuma (*Amphiuma means*). Two-toed amphiumas are found in coastal plain habitats. They occur in or near swamps, cypress bays, ditches, temporary ponds, sloughs, and sluggish streams. Petranka (1998) states that widespread loss of wetlands across the southeastern US has undoubtedly eliminated many local populations.

One-toed Amphiuma (*Amphiuma pholeter*). This species inhabits floodplain swampy terrace streams and swamps of streams.

Three-toed Amphiuma (*Amphiuma tridacylum*). The Three-toed Amphiuma also inhabits coastal plain habitats, and prefers semi-permanent or permanent habitats across this range. Habitats include: swamps, sloughs, sluggish streams, as well as permanent ponds (Baker 1945; Cagle 1948; Chaney 1951).

Southern Dwarf Siren (*Pseudobranchus axanthus*). Southern Dwarf Sirens can be found in cypress ponds, swamps, ditches, marshes, and other permanent and semi-permanent aquatic habitats in peninsular Florida (Moler & Kezer 1993). While little information currently exists on this species, Petranka (1998) notes that populations have undoubtedly been eliminated as a result of wetland destruction.

Northern Dwarf Siren (*Psedobranchus striatus*). This Siren species has been documented to live in cypress swamps, flooded ditches, marshes, and other permanent and semi-permanent aquatic habitats (Harper 1935; Martof 1972).

Lesser Siren (*Pseudobranchus intermedia*). Lesser Sirens inhabit a variety of permanent and semipermanent habitats. These habitats may include: marshes, swamps, farm ponds, ditches, canals, sloughs, sluggish creeks. Many local populations have been destroyed by loss of wetlands (eg. Bury et al 1980).

Greater Siren (*Pseudobranchus lacertia*). This species inhabits a variety of permanent and semi-permanent aquatic habitats, including ditches, canals, marshes, farm ponds, rice fields, lakes, as well as sluggish streams and rivers which may often be choked with aquatic plants (Duellman and Schwartz 1958; Martof 1973).

C. THE ENVIRONMENTAL REPERCUSSIONS OF WITHDRAWING FEDERAL PROTECTION FROM HEADWATER STREAMS AND OTHER SO-CALLED "ISOLATED" WATERS WOULD BE SEVERE

1. The Scope of Streams at Risk

As described above, the ecosystem value of headwaters streams is enormous. These streams are the vast majority of all streams, measured either in numbers or length in miles. No comprehensive study of headwaters streams exists for the U.S., but Leopold *et al.* (1964) estimated that 95 percent of the stream channels and 73 percent of the total stream channel length is composed of first- and second-order streams. Leopold based this classic estimate on the best source available, USGS 1:24,000 scale topographic maps, yet he knew at the time that these maps were notoriously inaccurate and underestimated the actual extent of small streams networks.

Ohio EPA found in a survey of its own waters that only 21,048 miles of streams were shown on USGS 7.5-minute (1:24,000 scale) maps, yet 115,206 miles were identified and classified by

Ohio EPA as primary headwater streams. Furthermore, a large number of streams shown as intermittent on topographic maps were found to be high-quality perennial cold spring-fed streams (OH EPA 2002). This points not only to the inadequacy of existing maps and surveys of streams, but also to the difficulty in accurately drawing distinctions among streams based on parameters like flow frequency.

A detailed long-term study of the Coweeta Creek watershed in western North Carolina also shows the extent of headwaters streams that are often not captured on existing maps. Less than 15 miles of streams are indicated on a 1:24,000 scale map, while 33.6 miles appear on 1:7200 scale maps. Similarly, in the Chattanooga River basin, ground surveys revealed that 1:24,000 scale maps identify only 21 percent of the existing stream channel length (Meyer and Wallace 2001).

Widely accepted scientific models in use today that estimate the proportion of small streams within a particular river network show that, for example, in a 5th-order basin, first and second order headwater streams should account for approximately 95% of the total number of streams, 75% of the total stream length, and 40% of the total streambed area (Meyer *et al.* In preparation).

Further, given well-documented inadequacies in accurately mapping stream lengths, as discussed above, many intermittent and ephemeral stream reaches are never even identified. In a February 2003 literature review conducted by U.S. EPA at its Wheeling Lab the following example of this problem was noted:

> Hansen (2001) explored the scale issue and tried to categorize stream types when he surveyed streams within the Chattanooga River watershed in the Blue Ridge Mountains of Georgia, South Carolina and North Carolina...A computer based mapping exercise that used contour crenulations with field verification estimated 1300 km [kilometers] of perennial streams. Of the 1300 km identified, the topographic maps indicated only 50-75 % of the total perennial length, depending on scale. Approximately 59% of the total stream length was made up of first-order streams...Of the total 4666 km of total streams identified, only 28% were considered perennial based on the presence of a defined channel and certain indicator macroinvertebrate taxa. The remainder of the stream length was intermittent (17%) or ephemeral (55%).

American Rivers and Earthjustice also investigated streams data published by U.S. EPA in its *1998 National Water Quality Inventory* (305(b) report), the last biennial report for which this data is compiled and published in one place for all states. EPA reports a total of 3,662,255 total miles of streams, and 1,298,134 miles of perennial streams, or 35 percent of total streams. Simple arithmetic would suggest that the remainder, 65 percent are non-perennial, however, EPA reports 1,594,672 miles of non-perennial streams, or 44 percent of total stream miles (U.S. EPA 2000). We assume that this discrepancy is due to deficiencies in state data reported, as many states did not report non-perennial streams and instead EPA estimated them based on very coarse resolution map data.[37] For the reasons outlined above this number vastly underestimates the actual extent of intermittent and ephemeral streams.

EPA's national stream network characterization analysis shows that in every one of the 19 ecoregions studied, all first and second order streams are intermittent, and in numerous regions, third and fourth order streams also are intermittent. Further, the analysis shows that the vast majority of first-to fourth order streams miles are intermittent in all ecoregions, with some regions having no perennial streams in their average fourth-order stream watersheds (U.S. EPA 2002a).

Two maps for Wisconsin and New Mexico visually depict the extent of intermittent streams in river networks, developed based on seamless GIS-based layers (see Exhibits 1 and 2, attached). Though these maps are based on hydrography data at different scales, both clearly show how integral non-perennial waters are to the entire river network. In short, it is not possible to "disconnect" non-perennial streams from the downstream waters into which they flow without making artificial distinctions that have no basis in science.

Headwater streams dominate the drainage network of most river networks. For example, headwaters in the Chesapeake Bay watershed comprise more than 65 percent of the total mileage of streams and rivers that drain to the Bay, supplying 90 percent of the freshwater flow, as well as nutrients, sediments, and pollutant loads that drives the health of the nation's largest estuary. However, many of these streams are inadequately protected and are being degraded or completely obliterated. Despite their importance, nearly 20 percent of all streams in the Chesapeake Bay watershed have been ditched, channelized, or enclosed in pipes, concrete channels and culverts to accommodate development (CWP and NEETF 2002a).

Rock Creek in Maryland provides a classic study of the loss of headwaters to urbanization. Surveys showed the creek lost 58 percent its drainage density (stream length in a square kilometer) between 1913 and 1968 (Meyer and Wallace 2001). Studies in the Upper Chattachoochee River watershed show that one-third of stream length has been lost, primarily small headwater streams, and is undoubtedly an underestimate because the study estimated stream loss using 1:24,000 maps, which do not adequately display the smallest streams (Meyer and Wallace 2001). Similar examples can be found throughout the country. Other activities, such as mountain-top removal and valley fill mining techniques practiced in Appalachia, buried nearly 870 miles of streams between 1986 and 1998, with over 450 miles of streams buried in West Virginia alone (Meyer and Wallace 2001).

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[37] Note: where state data was unavailable or insufficient, EPA reported data for states based on its Reach File V.3, or RF3, database that uses 1:100,000 scale information. EPA itself admits that: "Direct evaluation using only EPA's RF1 and RF3 hydrologic stream coverages would grossly undercount the number of streams..." (U.S. Environmental Protection Agency, *Environmental Assessment for Proposed Effluent Guidelines and Standards for the Construction and Development Category*, Appendix B: Inventorying of Streams Potentially Impacted By Construction Activities, EPA-821-R-02-009, June 2002, p. B-6)

Using data on acres developed, distribution of perennial and intermittent streams, and stream length by ecoregion, EPA estimated that roughly 10,000 perennial stream miles and 36,000 intermittent stream miles *annually* are potentially affected by construction site runoff across the nation, based on national data on average acres developed annually, distribution of perennial and intermittent streams, and stream length by ecoregion (U.S. EPA 2002). This gives a sobering picture of impacts of development to small streams.

As the nation's leading aquatic ecologists note in their comment letter to the docket:

> The loss of headwater streams has profoundly altered the structure and function of stream networks. Elimination of small tributaries from Clean Water Act jurisdiction would lead to further loss and degradation of these systems to the detriment of the physical, chemical and biotic integrity of ecosystems downstream.

2. Nature of Environmental Threats

The removal of protections from filling, ditching and draining, and discharging pollutants into supposedly "isolated" wetlands, ponds and streams would likely result in losses and degradation of many of these waters. The intrinsic values of many of these waters would be compromised, and their important ecosystem services to downstream waters would be reduced or eliminated.

a. Loss of Flood Storage, and Aggravated Flooding Conditions

Several prominent studies have linked increased flooding conditions or frequency with losses of wetlands and their flood storage capacity. Additional evidence is available from Minnesota, where the more stable flows of the Rainy River basin are attributed to the existence of more ponds and wetlands upstream. In their primer on Minnesota rivers, Renwick and Eden (1999) compare the stability of the Rainy River basin with the Red River basin, which is more flood-prone due to the channelization of streams and draining of upland areas and prairie marshes. The costs of flood damage in the Red River basin in 1997 totaled over $830 million. (www.shorelandmanagement.org/depth/rivers/10.html).

Removing protections from depressional wetlands that store floodwaters could result in higher flood peaks. Few studies are available which explore this relationship, however, a 1987 Soil Conservation Service report on the Indian Creek and the Butterfield Creek watersheds in the vicinity of Chicago, Illinois addresses the link directly (Bartels 1987). The existing flood storage capacity of the depressional wetlands in the two watersheds is estimated, and the effects of future development on future flood peaks are estimated, assuming different rates of stormwater detention, calculated with and without loss of the natural storage. Projected future flood peaks are substantially higher than existing levels when natural storage is removed.

b. Loss of Groundwater Recharge

The comments of the Director of USFWS to the Department of the Interior regarding the ANPRM note concern over the potential loss of wetlands and streams that are critical to replenishing groundwater aquifers and sustaining baseflows in streams. The sedimentation that has already occurred from disturbances to some playa lakes has resulted in reduced recharge capacity (Haukos In preparation).

c. Groundwater Contamination

Discharges of waste from Confined Animal Feeding Lots has already resulted in contamination of water infiltrating to groundwater from playas. (Haukos In preparation)

d. Streambank Erosion and Sedimentation

As previously discussed, headwater streams and wetlands store and release flood flows, limiting erosion of streambanks and the resulting sedimentation. Removal of protection from these waters would promote increased ditching, channelization and filling-in of headwater streams and wetlands, leading to increased channel instability, degraded water quality and aquatic habitat.

e. Surface Water Quality Degradation

Filling or draining of depressional wetlands such as pocosins eliminates their runoff filtering role in the watershed, resulting in degraded water quality in freshwater and estuarine receiving waters (Richardson 2003). The impacts of gravel mining and nearby development have resulted in degraded water quality and altered hydrology of fens (Bedford 2003).

f. Loss of habitat

Reduced protection for small wetlands and headwater streams would seriously impact a wide range of species. Specialized species populations that rely on these waters for essential life stage needs would be especially vulnerable, and increased endangerment would be likely (USFWS comments to DOI 2003).

VI. NO OTHER CHANGES ARE NEEDED TO THE DEFINITION OF "WATERS OF THE U.S."

The ANPRM specifically invites commenters' views "as to whether any other revisions are needed to the existing regulations on which waters are jurisdictional under the CWA." 68 FR 1994. This open-ended invitation is troubling, as it indicates that the EPA and Corps may consider changes to the existing regulations even beyond those covered by the specific questions in the Federal Register notice.

Industry groups and those who represent them (or are funded by them) are already contending that the jurisdictional regulations should be changed to exclude all but traditionally navigable waters and wetlands directly adjacent to traditionally navigable waters from the protections afforded by the Clean Water Act. For example, in its comments submitted to the docket, the Pacific Legal Foundation claims: "Waters of the United States should be confined to those that are navigable, could be made so through reasonable efforts, or those that are inseparably bound up with and immediately abut navigable waters." This is preposterous and completely at odds with the Clean Water Act.

Any effort to limit the jurisdictional reach of the Clean Water Act by amending the definition of "waters" should be rejected, including those suggested by the EPA and Corps in the questions about the (a)(3) factors and defining so-called "isolated" waters as well as any other revisions recommended by commenters in response to this open-ended question. No changes are needed to the existing definition of waters of the United States.

The existing regulations are consistent with the Clean Water Act and, indeed, are necessary if the goals of the Act are to be met. The Act's central goals are "to restore and maintain the chemical, physical, and biological integrity of our Nation's waters" and make all surface waters safe for fishing, swimming and other uses. Congress intended to achieve these goals by enacting a comprehensive regulatory program to control and eliminate the discharge of pollutants be controlled at the source.[38] The current regulations on jurisdiction effectuate the scope and purposes of the Act.

Arguments that revisions to the definition of "waters" must be made to respond to the Court's decision in *SWANCC* are fully refuted above. In addition, the Department of Justice has now filed dozens of briefs in federal court about the validity of the existing jurisdictional regulations post-*SWANCC* on behalf of the EPA and the Corps of Engineers.

Rather than finding that the definition of waters of the U.S. needs to be changed by a new rulemaking, as the ANPRM suggests, the DOJ has consistently argued that the agencies' existing definition of waters of the United States remains sound and, indeed, is required to achieve the purposes of the Clean Water Act. The DOJ's arguments make the suggestions by EPA, the Corps, and other administration officials that *SWANCC* somehow requires or justifies changes in the existing jurisdictional regulations even more transparently false.

The Department of Justice has consistently argued that the *SWANCC* decision was limited to invalidating the policy of using migratory bird habitat as the sole basis for asserting Clean Water Act jurisdiction over so-called "isolated," non-navigable, intrastate waters.

> The only question addressed in *SWANCC* was whether the Corps could exercise regulatory jurisdiction over *hydrologically isolated*, nonnavigable, intrastate ponds under 33 C.F.R. 328.3 (a)(3), based solely on the use of those ponds as habitat for migratory birds....The Court did not ... opine on the Corps' authority under subsection (a)(5) or any of the other subsections of the regulatory definition of 'waters of the United States.'[39]

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38 *See* S. Rep. No. 92-414, at 77 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3742.

39 *Rice v. Harken,* Supplemental Amicus Curiae Brief of United States, U.S. Department of Justice, May 2001at 7-8. (emphasis in brief).

In the brief for the United States in *U.S. v. Newdunn* before the Fourth Circuit, the Justice Department argued that "federal regulations reasonably construe the [Clean Water Act] term "waters of the United States" to include wetlands adjacent to all tributaries, not just primary tributaries, to traditional navigable waters.[40]

Seeking to overturn the district court's holding, the DOJ's *Newdunn* brief argues that a narrower construction of jurisdiction would be inconsistent with the Act itself. The DOJ points out that the lower court:

> . . . fails to explain why or how Congress could have intended to regulate discharges into all primary tributaries but not secondary tributaries, regardless of their significance to the traditional navigable waters into which they flow, directly or indirectly. In contrast, the agencies have made a persuasive and compelling determination that if the CWA is to achieve its goal, it is essential to include all tributaries of traditional navigable waters and their adjacent wetlands in the permitting system.[41]
>
> The regulations have consistently construed the Act to encompass wetlands adjacent to tributaries to traditional navigable waters – be they primary, secondary, tertiary, etc. – since 1975, a construction that comports with Congress's intent to control pollution at its source and broadly protect the integrity of the aquatic environment.[42]

According to the Department of Justice (DOJ), interpreting *SWANCC* as limiting Clean Water Act jurisdiction to wetlands adjacent only to traditional navigable waters and their primary tributaries would effect a "radical contraction of CWA jurisdiction."[43]

The brief for the United States in *U.S. v. Rapanos* before the Court of Appeals for the Sixth Circuit emphasizes the limits of the *SWANCC* decision:

> *SWANCC* does not limit the coverage of the CWA to navigable-in-fact waters and wetlands adjacent thereto. To the contrary, the *SWANCC* Court specifically characterized as 'plausible' the argument made by the petitioners that "Congress simply wanted to include all waters adjacent to 'navigable waters,' such as non-navigable tributaries and stream," with the Act's scope. The Court also quoted with approval its prior holding that "Congress' concern for the protection of water quality and aquatic

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40 *United States v. Newdunn,* Opening Brief of United States, August 2002, at 28.

41 *Id.* at 48 (emphasis added).

42 *Id.* at 29(emphasis added).

43 *Id.* at 26.

> ecosystems indicated its intent to regulate wetlands 'inseparably bound up with 'waters' of the United States."[44]

The Department of Justice has described in detail in many briefs how limiting the jurisdiction of the Act to only navigable waters and waters directly adjacent thereto would disserve the purposes and goals of the Clean Water Act. For example, in *Rapanos* the brief for the United States says that:

> To exclude non-navigable tributaries and their adjacent wetlands from the coverage of the Act would disserve the recognized policies underlying the Act, since pollution of non-navigable tributaries and their adjacent wetlands can have deleterious effects on traditionally navigable waters.[45]

In *United States v. Interstate General Co,* the Department argues that the "logical result" of treating certain waters as unprotected by the Clean Water Act:

> . . . could be that oil, hazardous substances, or other pollutants could be discharged without a CWA permit into any stream, creek or river, so long as it was not traditionally navigable, and those pollutants could reach and foul traditional navigable waters without the United States being able to take action under the CWA to prevent it. Likewise, entities currently discharging into traditional navigable waters under NPDES permits could change their outfall points to non-navigable creeks in an effort to avoid treatment requirements under the CWA. Had the Supreme Court in *SWANCC* intended to work such a change in the Clean Water Act, it would doubtless have stated that purpose explicitly."[46]

These briefs provide additional strong evidence that no changes to the Clean Water Act regulations are required and that such changes would radically rewrite the longstanding interpretation of the law, contradict the purposes of the Act, and threaten communities and wildlife that depend on clean water for survival.

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44 *United States v. Rapanos,* Opening Brief of United States, July 2002 at 23 (internal citations omitted).

45 *Id.* (emphasis added.)

46 *United States v. Interstate General Co.*, Brief of United States, U.S. Department of Justice, October 2001 at 43.

VII. STATE AND OTHER FEDERAL REGULATORY PROGRAMS ARE INSUFFICIENT TO "BACKSTOP" FEDERAL CLEAN WATER ACT PROTECTIONS FOR OUR NATION'S WATERS.

A. INTRODUCTION AND BACKGROUND

The ANPRM solicits "information and data…on the availability and effectiveness of other Federal and State programs for the protection of aquatic resources and practical experience with their implementation." As noted in the register notice, various other federal and state regulatory, acquisition, and restoration programs offer some level of protection to some types of waters. However, these programs are clearly inadequate to "backstop" protections provided waters under the CWA. Furthermore, it is highly unlikely that sufficient new efforts, or expansions of existing efforts, could ever fill the gaps left by withdrawal of federal CWA protection over some categories of waters.

The majority of Federal and State efforts to protect or restore waters have been developed over the past 30 years to complement, not replace, the Clean Water Act. As a result, even with the array of federal, state and private efforts available, large gaps in protection from pollution and physical modification exist for many types of waters. Indeed, despite 30 years of broad Clean Water Act jurisdiction and the supplemental protection provided by other federal, state, local and private efforts, 40 percent of the nation's waters are still too polluted to support fishing or swimming. Despite numerous programs dedicated to restoring wetlands, the National Wetlands Inventory still reported net losses of nearly 58,000 acres per year between 1987 and 1997, estimates widely considered to be overly optimistic. Additionally, the Status and Trends report noted a decline in wetland functioning. Similarly, "the available scientific evidence clearly demonstrates that the length of headwater streams in the landscape has been significantly reduced…." (Meyer, Wallace, et. al. 2001).

B. STATE LEVEL BACKSTOPS ARE INSUFFICIENT

The very premise that states have the capability and desire to independently protect wetlands and headwaters is a flawed one. The reality is that states serious about protecting these waters almost invariably prefer to do so in partnership with the Corps and EPA enforcing the CWA. Withdrawal of CWA jurisdiction will mean, in reality, elimination of all regulation of so-called "isolated" wetlands and headwaters.

1. The CWA's Federal-State Partnership Framework Offers States Ample Opportunity to Independently Protect Wetlands and Headwaters, Yet Only Two States Have Chosen to "Go It Alone."

The CWA is structured and administered as a partnership between the EPA and the States. Because water pollution and aquatic habitat impacts do not recognize state boundaries, the CWA and EPA establish minimum standards -- a federal floor -- that ensure a base level of protection from the harmful effects that the pollution and wetland destruction in one state may have on the water quality, flood control, and wildlife in another state. Efforts to clean up the Chesapeake Bay offer but one graphic example. Four states and the District of Columbia share the Bay watershed and all of them must work to control wetland losses and restrict chemical pollution if water quality degradation in the Bay is to be reversed. Uniform federal standards and active federal involvement are prerequisites to any chances of clean up success.

Uniform federal standards also protect the interests of federal taxpayers in each state from the fiscal impacts of poor water resource decisions in other states because "their federal taxes help pay the bill when federal assistance is required through increased public healthcare costs, flood protection, emergency relief and environmental cleanups when wetlands are not allowed to do their job." *SWANCC*, supra, Amicus Curiae Brief of the States of California, Iowa, Maine, New Jersey, Oklahoma, Oregon, Vermont, and Washington, at 21 ("States' *SWANCC* Brief"). The CWA's federal floor also "levels the playing field" and prevents the proverbial "race to the bottom" so that states that do act to protect their waters from pollution and destruction are not placed at a competitive disadvantage by those states who choose not to do so. The CWA and its federal enforcement thus provide both a prod and a safety net to undergird the efforts of states that want to be good stewards of the environment. Testimony of Patrick Parenteau, Professor of Law, Vermont Law School (House of Representatives Committee on Government Reform, September 19, 2002, "Hearing Regarding Implications of the Supreme Court's *SWANCC* Decision").

While the CWA and federal oversight and enforcement provide the federal floor, the CWA partnership framework acknowledges that the specific means and priorities and pollution threats are likely to differ state by state and drainage basin by drainage basin, and that state governments are best positioned to identify and implement water pollution controls at the state level that will achieve the CWA goals and standards. So, for example, the CWA requires states to adopt state water quality standards consistent with federal CWA water quality criteria and guidance. State water quality standards can be tailored to provide additional protection to outstanding resource waters and to water resources of particular concern, including wetlands.

Among all the other reasons why reinterpreting "waters of the U.S." as applying only to navigable-in-fact waters and adjacent wetlands (as industry proponents suggest) is illegal and environmentally irresponsible, it would directly conflict with the requirements of the CWA. Several of the Act's provision give rights to downstream states to protect their waters from upstream discharges that violate state water quality standards. For example, § 402(b) gives the downstream state notice, the opportunity for comment, and the opportunity for a hearing on the upstream state's permit application. 33 U.S.C. § 1342(b). Such rights would, or course, become meaningless if the upstream state were no longer required to obtain a permit. *See generally, Arkansas v. Oklahoma*, 503 U.S. 91, 105 (1992) (EPA has the statutory authority to require an upstream discharger to meet the water quality standards of the downstream state.).
See also 40 C.F.R. § 122.4(d) (prohibiting permit issuance when imposition of conditions cannot ensure compliance with applicable water quality requirements of all affected States).

In addition, § 401(a)(2) prohibits the issuance of any federal license or permit over the objection of an affected State unless compliance with the affected State's water quality requirements can be ensured. 33 U.S.C. § 1341(a)(2); *Arkansas v. Oklahoma*, 503 U.S. at 103. This right would also be lost with respect not only to NPDES permits, but also every other federal license or permit authorizing a discharge into waters whose protection had been abandoned.

One of the most important aquatic resource protection tools the CWA provides the States is the States' water quality standards certification authority under § 401, 33 U.S.C. § 1341. This authority allows states to condition or, if necessary, bar federal permits, including CWA § 404 dredge and fill permits, to ensure that federally permitted activities comply with the State's water quality standards. Since 1972, most states have relied exclusively on their CWA § 401 certification authority to protect their wetlands, lakes, streams, and other surface waters from activities that involve discharges of dredged or fill material into those waters. A rollback of CWA jurisdiction from so-called "isolated" wetlands and headwaters will mean that federal CWA permits will no longer be issued in these waters and most states will thus be stripped of their only avenue for restricting discharges of dredged and fill material in these waters.

The CWA partnership framework also offers states the opportunity to assume control of federal CWA § 402 (National Pollution Elimination Discharge System (NPDES)) and § 404 permitting programs. To assume these permitting programs and effectively step into the permitting shoes of the EPA (and the Corps for § 404), states must enact state statutes and rules, and provide the necessary program resources, to establish standards and programs as stringent as the federal CWA standards and programs. EPA provides continuing financial and technical resources to states that assume these programs, as well as providing continuing oversight to ensure compliance with CWA standards.

Forty-five of the 50 states have now assumed most or all of the NPDES program from EPA, and are now applying their own state laws and regulations to restrict pollution discharges from point sources into state waters. It is telling, though, that only two of the 50 states, Michigan and New Jersey, have elected to assume the CWA § 404 permitting program.

Numerous states, including Florida, Maryland, Pennsylvania, Minnesota, and Wisconsin, have considered and rejected state assumption of § 404. Many states concluded that the financial and technical resources, and the political capital, required to effectively administer their own comprehensive dredge and fill permitting program without the under-girding of the federal CWA program were simply prohibitive. Instead of assuming the CWA § 404 program, these states have elected to protect their waters from dredge and fill discharge activities through state-federal partnerships through which they share with EPA and the Corps the considerable permitting and enforcement responsibilities, resources, and expertise required to effectively protect wetlands and other non-navigable waters from dredge and fill activity.

As state and federal permitting programs have evolved over the last twenty years, in particular, many states have developed efficient and effective means of combining tools such as CWA § 401 certification, CWA § 404 state programmatic general permits (SPGPs), and Corps-state joint permit applications and review procedures that streamline federal and state permitting while efficiently leveraging Corps and EPA financial and technical resources made available through the CWA permitting program. See, States' *SWANCC* Brief at 25-26. A CWA rollback from so-called "isolated" wetlands and headwaters will remove the federal CWA under-girding for these state efforts and, in most cases, remove protection from these waters from dredge and fill activities completely. As the States remarked in their *SWANCC* Brief, "If they are to be 'laboratories for experimentation,' the States' freedom to innovate should include the opportunity to coordinate the management of their natural resources with the federal government." Id. at 26-27.

2. Thirty-Two States Have No Independent State Permitting Program to Protect So-Called "Isolated" Wetlands from Drainage, Dredging, and Filling Activities.

At most, 18 states now have programs regulating wetland alterations in at least some "isolated" wetlands and other waters. Thirty-two states -- about two thirds of the United States -- currently lack regulatory programs to fill the gap that would be left by a CWA rollback from so-called "isolated" wetlands. A CWA rollback from so-called "isolated" waters will leave these waters completely vulnerable to uncontrolled dredging, drainage, and filling in these 32 states. Little or no state protection is provided in the states with some of the largest seasonal wetland acreages, including Alaska, Louisiana, Texas, North Dakota, South Dakota, South Carolina, Georgia, Kansas, and Mississippi. See, Kusler, Jon, The *SWANCC* Decision and State Regulation of Wetlands (2001) (http://aswm.org/fwp/*SWANCC*/aswm-int.pdf) at 9. Information about the existing programs in 13 of the 32 states that lack "isolated" wetlands protection is provided below. These selected state-by-state summaries demonstrate the inability of the vast majority of states to fill the regulatory gap left by a rollback of CWA jurisdiction.

a. Mid-Atlantic Region

Delaware

While Delaware has an independent state tidal wetlands permitting program, its jurisdiction extends only to tidal wetlands and very large (400 or more acres) freshwater wetland systems. To the extent Delaware is regulating freshwater wetland drainage, dredging, and filling it is doing so through its CWA § 401 certification authority. Withdrawal of federal CWA jurisdiction will likely leave many Delaware freshwater wetlands and headwater tributaries unprotected. The removal of federal CWA authority over so-called "isolated" wetlands and other waters, and "upstream" tributaries such as ditches, ephemeral streams and intermittent streams, will remove state 401 certification authority over CWA § 404 dredge and fill activities in these waters.

Delaware's Department of Natural Resources and Environmental Control (DNREC) appears to have some legal authority under state law to enforce its water quality standards in broadly defined waters of the State, including wetlands, and to require permits for discharges in state waters and on submerged lands. However, these authorities are not actively applied through a state permitting program, and establishing such a program would require additional rulemaking and scarce resources. Wetland-specific water quality standards would likely be one important rulemaking addition necessary to effectively fill the regulatory gap left by federal withdrawal of CWA § 404 permit authority. Like most states, Delaware is struggling with a significant budget shortfall, making regulatory program expansion highly unlikely. Governing Magazine (May 2002).

Even if these administrative and financial obstacles could be overcome to launch such a regulatory initiative, serious regulatory gaps would likely remain due to existing state exemptions from regulation for channelized streams and drainage ditches. The majority of Delaware's 2,600 miles of natural and ditched streams would likely be exempt from regulation if CWA jurisdiction is withdrawn from these waters. At risk wetlands in South New Castle County may enjoy some protection by county ordinance, but no other counties have such protections in place, nor does it appear that they will in the foreseeable future. Absent either a state or federal regulatory floor, even the South New Castle County ordinance would seem to be politically vulnerable.

In response to *SWANCC*, a bill was introduced in the legislature's 2002 session (HB 340 and HS 1 amendment) to protect up to 30,000 acres of identified and mapped "isolated" freshwater wetlands eliminated from CWA jurisdiction after *SWANCC*. This bill was opposed by "pro-growth" groups including the Delaware Homebuilders and failed to pass.

An estimated 33% of Delaware's freshwater wetlands may be in jeopardy due to withdrawal of CWA jurisdiction. The percentage of wetlands at risk could be even higher if drainage ditch connections fail to qualify wetlands as tributary or adjacent to regulated waters.

b. Southeast Region

Alabama

Alabama has no independent state permitting program that regulates discharges of dredged or fill material into freshwater wetlands or headwaters. Alabama's only wetland protection program is for wetlands located in designated coastal areas. Alabama does regulate certain more geographically-isolated wetlands within these designated coastal areas (Mobile or Baldwin County) under the Alabama Coastal Area Management Program (ACAMP). In Alabama, "isolated" wetlands in coastal areas include "grady" ponds and "depressional" wetlands (typically found in relic beach and dune systems). Furthermore, Alabama does not appear to actively use its CWA § 401 certification tool to restrict dredge and fill activities in the state's freshwater wetlands.

Alabama probably could enforce its water quality standards in many of the state's freshwater wetlands and streams under state law. However, Alabama's "waters of the state" excludes waters that are "entirely confined and retained completely" on a single owner's property "unless such waters are used in interstate commerce." This exclusion would likely leave some more "isolated" waters unprotected under state law, particularly if groundwater connections and uses in interstate commerce are not recognized.

In addition, Alabama's water quality standards and NPDES program rules seems to both preclude their application to "dredged or fill material which is subject to regulation under

FWPCA [Federal Water Pollution Control Act]." Alabama's water quality standards also lack designated uses or narrative standards specific to wetlands or to dredge and fill discharges into waters of the State.

Consequently, any initiative to create a state freshwater wetlands permitting program would require, at a minimum, wetland water quality standards, additional rulemaking, and additional resources. Alabama is also struggling with a significant budget shortfall, making regulatory program expansion highly unlikely. Governing Magazine (May 2002).

Georgia

Georgia has no independent state permitting program that regulates discharges of dredged or fill material into freshwater wetlands or headwaters. Georgia's only wetland protection program is for tidal wetlands. Furthermore, Georgia does not appear to actively use its CWA § 401 certification tool to restrict dredge and fill activities in state freshwater wetlands.
Like Alabama, Georgia's water quality standards probably could be enforced to protect many of the state's freshwater wetlands and streams, including so-called "isolated" wetlands and ponds, except where those waters are entirely confined to a single owner's private property. This exception would likely leave some more "isolated" waters unprotected under state law, particularly if groundwater connections are not recognized. In addition, Georgia's water quality standards do not include designated uses or narrative standards specific to wetlands or to dredge and fill discharges into waters of the State.

Any initiative to create a state freshwater wetlands permitting program would require, at a minimum, wetland water quality standards, additional rulemaking, and additional resources. Georgia is struggling with at least a $500 million budget shortfall, making regulatory program expansion highly unlikely. Governing Magazine (May 2002).

c. Eastern Central and Great Lakes Region

Illinois

Illinois has no independent state permitting program to regulate dredge and fill activities in its wetlands and headwaters. To the extent Illinois is regulating freshwater wetland drainage, dredging, and filling it is doing so through its CWA § 401 certification authority. Withdrawal of federal CWA jurisdiction will likely leave many Illinois wetlands and headwaters unprotected. The removal of federal CWA authority over so-called "isolated" wetlands and other waters, and "upstream" tributaries such as ditches, ephemeral streams and intermittent streams, will remove state 401 certification authority over CWA § 404 dredge and fill activities in these waters.

Illinois' Pollution Control Board (Board) and Environmental Protection Agency (EPA) appear to have legal authority to enforce state water quality standards -- including antidegradation standards -- in broadly defined waters of the State, including wetlands. However, these authorities are not actively applied through a state permitting program, and establishing such a program would require additional rulemaking and scarce resources. Wetland-specific water quality standards would likely be one important rulemaking addition necessary to effectively fill a regulatory gap left by federal withdrawal of CWA § 404 permit authority. Thus far, neither the Board nor the EPA have taken steps to establish any such permitting program. Illinois is struggling with at least a $250 million budget shortfall, making regulatory program expansion highly unlikely. Governing Magazine (May 2002).

In response to *SWANCC*, Illinois conservation groups tried to pass legislation in 2002 to put a state permitting program in place that would cover all activities affecting wetlands for which no federal or other state permit had been obtained. The bill failed after intense lobbying efforts from homebuilders, realtors, farm bureaus, chamber of commerce and others shut it down. Filling the regulatory gaps left by *SWANCC* -- and any additional post-*SWANCC* CWA rollback -- is now a matter of debate at legislative study meetings in Illinois. In the absence of state action, three Illinois counties have adopted wetland protection ordinances, and a fourth county may do so soon.

In 2001, the Illinois Department of Natural Resources estimated that about 150,000 acres of Illinois wetlands have lost CWA protection as a result of *SWANCC*. Corps figures from 2002 showed that the Corps was issuing on average at least one "no jurisdiction" call per working day in the Chicago area since the *SWANCC* decision in early 2001.

Indiana

Indiana has historically relied heavily on its CWA § 401 certification authority to protect state wetlands, including so-called “isolated” wetlands, from draining, dredging, and filling. Absent CWA jurisdiction covering "isolated" waters and headwaters, Indiana will lose the § 401 regulatory tool with respect to these at risk waters, and many of them will lose both state and federal protection.

On paper, the Indiana Water Pollution Control Board (Board) has statutory authority to adopt rules and require permits to enforce its water quality standards and otherwise control and prevent pollution in "*any of the streams or waters of Indiana,*" including *all* accumulations of water, surface and underground, natural and artificial, public and private, with the exception of certain "private ponds." The Board and the Indiana Department of Environmental Management (IDEM) have been in the process of promulgating new wetland water quality standards toward this end. After *SWANCC*, the Board and IDEM proposed to extend this permitting authority to the "isolated" waters the Corps was no longer regulating, relying on existing state permitting authority.

Importantly, though, these attempts to fill the post-*SWANCC* regulatory gap were immediately challenged both in court and in the legislature. The legal challenge is still pending in the Indiana Supreme Court. Indiana Department of Environmental Management v. Twin Eagle, Civ. No. 49S00-0204-CV-00237 (Notice of Appeal filed February 15, 2002). Now, in the 2003 legislative session, the Indiana Homebuilders and other regulated community interests are pressing for legislation that, like Ohio's, will likely exempt most “isolated” wetlands. In addition, Indiana has a huge budget deficit and is highly unlikely to support regulatory program expansion in the current fiscal environment. Governing Magazine (May 2002). For both political and budgetary reasons, it will be very difficult for Indiana to fill the regulatory gap left by a CWA rollback.

IDEM has conducted a relatively detailed GIS study of its wetlands and determined that more than 30% could be considered "isolated" and in jeopardy due to withdrawal of CWA jurisdiction. The percentage of wetlands at risk could be even higher if drainage ditch connections and intermittent streams fail to qualify wetlands as tributary or adjacent to regulated waters.

d. Southwest Region

Arizona

Arizona's only wetland/dredge and fill permitting program is its CWA § 401 water quality certification program. The contemplated rollback of CWA jurisdiction over so-called "isolated" wetlands and other waters, and headwater tributaries such as ditches, ephemeral streams and intermittent streams, will also remove the state § 401 certification authority over these waters. As there is no analogous protection under state law, these waters will be unprotected from dredge and fill activity at both the federal and state levels.

The Arizona Department of Environmental Quality (ADEQ) has the legal authority to adopt state water quality standards and enforce them through the Arizona Pollution Discharge Elimination System (AZPDES) permitting and § 401 certification programs. These water quality standards include antidegradation standards and a requirement to protect designated uses in "surface waters," including wetlands and intermittent and ephemeral streams. However, both the water quality standards and the AZPDES permitting rules apply only to "surface waters" or "navigable waters," defined in state law as coextensive with "waters of the United States." Consequently, it is likely that a withdrawal of federal CWA jurisdiction over certain wetlands and headwater tributaries will be followed by a similar withdrawal of state jurisdiction.

The AZPDES program was authorized and established under state law in 2002 in order to allow state assumption of the federal CWA NPDES/§ 402 program, and the authorizing statute expressly precludes "any requirement that is more stringent than" those mandated by the CWA. See Section 6. Consequently, any rollback in CWA jurisdiction will lead automatically to a commensurate reduction in state-level regulatory protections.

Even if Arizona could overcome these statutory and rulemaking limitations, Arizona is struggling with a budget deficit of over $1 billion and is, for this reason alone, clearly incapable of taking on additional regulatory responsibilities at this time. Governing Magazine (May 2002).

Texas

Texas' only wetland regulatory program is its CWA § 401 water quality certification program. Any rollback of CWA jurisdiction over so-called "isolated" wetlands and other waters will also remove the state § 401 certification authority over activities in these waters. These waters will thus be unprotected at both the federal and state levels.

The Texas Commission on Environmental Quality (TCEQ) appears to have legal authority to enforce water quality standards in broadly defined waters of the state, expressly including wetlands. The water quality standards expressly require the protection of existing uses of all state waters and, in particular, wetland water quality functions. However, Texas has no existing permitting program to enforce its water quality standards. The Texas Pollution Discharge Elimination System (TPDES) program may be weakened in at risk waters in the absence of federal CWA oversight and assistance.

In addition, the TCEQ permitting programs do not apply to oil and gas industry discharges. Oil and gas industry discharges are regulated by the Texas Railroad Commission and its pollution permitting program may also be weakened in at risk waters in the absence of federal CWA oversight and assistance.

e. Pacific West Region

Washington

Washington State has historically relied primarily on its CWA § 401 certification program to protect most of its freshwater wetlands, including "isolated" wetlands and headwaters, from drainage, dredging, and filling. A CWA rollback of authority over so-called "isolated" wetlands and ephemeral and intermittent streams would remove Washington's 401 certification authority and would leave these waters largely unregulated at both the federal and state level. However, both the Washington Department of Ecology and the Department of Fish and Wildlife have some independent state authority to protect these at risk waters, and these agencies could fill the regulatory gap if they could successfully build an effective permitting and enforcement program based on their existing regulatory authority. Unfortunately, there are considerable programmatic, budgetary, and political obstacles to their doing so.

The Department of Ecology has signaled that it may attempt to use its authority to protect so-called "isolated" wetlands, but there are several obstacles to its success. First, Washington's water quality standards are generally viewed as weak, and while they apply to wetlands, they do not include specific wetland standards. The primary means for the protection of wetlands is through the antidegradation requirements, but the antidegradation provisions simply prohibit further degradation that would interfere with beneficial uses, without any specific reference to beneficial uses for wetlands. A generic statement notes that "in addition to designated uses [of which there appear to be none], wetlands may have existing beneficial uses that are to be protected that include ground water exchange, shoreline stabilization, and storm water attenuation." This lack of clearly designated beneficial uses for wetlands makes enforcement of water quality standards in wetlands more difficult.

Second, in the absence of CWA § 401 authority, the Department of Ecology lacks a clear permitting vehicle and instead issues "orders" that notify the applicant that the proposed wetland fill will violate state law by violating state water quality standards, and that they can resolve the potential violation by providing specified mitigation. This approach seems to at best mitigate for wetland loss, not prevent it. Moreover, the Department of Ecology has virtually no resources devoted to enforcement. Thus, if a developer fails to notify the Department of its intent to fill an "isolated" wetland, it is highly unlikely that they will take any action on it. Absent CWA jurisdiction, the Ecology Department is not likely to be informed of many wetland fills, and so even the requirements for mitigation are not likely to be enforced. There is simply no mechanism by which the Department can look for or follow up on potential violations. The Department of Ecology also seems to have sufficient legal authority to extend its state regulatory program into ephemeral and intermittent streams, but it is unlikely to do because of lack of resources.

The Department of Fish and Wildlife can also protect so-called "isolated" wetlands and waters and ephemeral and intermittent streams using its permitting authority for any work that will "use, divert, obstruct, or change" the natural flow or bed of any waters in the state, presumably including these at risk waters. However, the WDFW has not historically used its permit authority aggressively, and when it was recently convinced to do so, the state legislature immediately took up consideration of bills to limit its authority under the code.

In addition, Washington has a $2 billion budget shortfall. The Department of Ecology is already strained by budget cuts and coming budget cuts will strain it further. Washington simply will not have the resources to expand its wetlands and headwater regulatory programs. In sum, political and funding constraints make it highly unlikely that Washington State will be able to fill the regulatory gap left by a CWA rollback.

In Washington State, 60%-80% of the wetland acreage in the Spokane area would be defined as "isolated" and redefined out of existence under this proposed rule; 30%-60% of all eastern Washington wetlands and 10%-20% of all western Washington wetlands would be "isolated" and unprotected. In Washington, approximately 80% of all duck production occurs in seasonal and "isolated" wetlands like those in the Columbia basin.

California

California has no independent wetland permitting or dredge and fill permitting program. California does not even have a standard definition or inventory of state wetlands. California also lacks state wetland water quality standards that designate wetland beneficial uses to protect wetland functions. California relies on the federal CWA § 401 water quality certification authority as its primary wetlands protection tool. Without § 401 authority, California will be unable to protect its wetlands and headwaters from draining, dredging, and filling. See, State Water Resources Control Board, Comment on Advanced Notice of Proposed Rulemaking on Definition of "Waters of the United States" (March 13, 2003; Docket ID No. OW-2002-0050) at 9 ("California ANPR Comment Letter").

In fact, California actually does have statutory authority to require permits for activities in wetlands, but state agencies have never developed a permitting program to enforce this law.

California recognizes that many of its unique and biologically diverse "isolated" wetland areas are now at risk, and that it needs to take action to protect these vital resources. Nevertheless, California recognizes that expanding its existing programs in the foreseeable future is unlikely because of the state's budget crisis. California is struggling with a budget deficit exceeding $1 billion. Governing Magazine (May 2002). Even with funding, California states that "preparing environmental documentation for and adopting regulations and policy to establish a State wetland program would take several years because of the controversial nature of this issue." California ANPR Comment Letter at 9-10.

In the 2002 legislative session, an attempt was made to amend the California Environmental Quality Act (CEQA) to explicitly require review of activities proposed in "isolated" wetlands. This attempt failed and the legislature is currently forming a committee to study a potential *SWANCC* fix for California waters.

Alaska

Generally speaking, Alaska has neither a functioning dredge and fill permitting program nor an NPDES permitting program. Alaska has not assumed the federal NPDES program. The state defines waters broadly to include the "at risk" waters that may be exempted by the Corps and EPA, but has no point source permitting program to protect these waters. Certain types of activities, such as the discharge of domestic and non-domestic wastewater and dewatering of excavations, are subject to some state permitting requirements. Those requirements do not generally intersect with CWA requirements. Fills in fish-bearing streams are regulated, as are fills within the Alaska coastal management zone (under the Alaska Coastal Management Program). However, the criteria for fills in both programs are less stringent than those found in the CWA § 404 program, and it is unlikely either will encompass many, if any, "at risk" waters. In addition, the current Alaska administration and legislature are actively hostile to wetlands protection. The legislature has consistently narrowed the range of plaintiffs able to challenge Alaska Coastal Management Program decisions. Protection for "at risk" waters in Alaska would be dramatically weakened by withdrawal of CWA jurisdiction.

f. Mountain States

Wyoming

Wyoming does not currently have an independent state permitting program that will protect "at risk" wetlands and waters from dredge and fill discharges. Instead, it has relied on its CWA § 401 certification authority to do so. Absent CWA jurisdiction over so-called "isolated" wetlands, headwaters and their adjacent wetlands, and intermittent and ephemeral streams, these waters will likely be left unregulated at both the state and federal level.

Wyoming has sufficient legal authority under state law to enforce its water quality standards -- including antidegradation standards -- in broadly defined waters of the state. Wyoming's broad definition of state waters expressly encompasses "at risk" waters such as "isolated" wetlands, headwaters, and intermittent and ephemeral streams. The water quality standards also expressly require compensatory mitigation for the fill of natural wetlands. Fills of all wetlands must be done in accordance with Wyoming's best management practices for non-point sources. However, Wyoming does not presently have a permitting process independent of CWA § 401 certification for enforcing these wetland water quality standards. Even if it did, Wyoming's wetland water quality standards fail to require the more protective impact avoidance and minimization standards employed by the § 404(b)(1) guidelines. At best, the Wyoming standards require only compensatory mitigation. In addition, unlike federal law, the Wyoming standards distinguish between "natural" and "man-made" wetlands and do not require mitigation for the latter.

The Wyoming Department of Environmental Quality states that it is drafting a general NPDES permit or permits to regulate fill discharges in most "at risk" waters currently regulated by the Corps. These general permits, if adopted, would likely apply to all "at risk" natural wetlands and "at risk" man-made wetlands which provide compensation for other wetland fills. The prospective general permit(s) should provide a mechanism for requiring compensatory mitigation as required by state law.

Establishing such a general permit program will require additional rulemaking and scarce resources that may not be available in the current fiscal environment. Moreover, even if a general permit is adopted, it is unlikely to provide even adequate compensatory mitigation for affected wetlands and other waters because a general permit scheme does not require site-specific environmental review.

Idaho

Idaho does not have an independent state permitting program regulating discharges of dredged and fill material. Moreover, its water pollution control laws expressly forbid extending protection to Idaho waters beyond that provided by the federal Clean Water Act. If "at risk" waters are not regulated under the CWA, they will not be regulated by the state of Idaho.

Utah

Utah has no state wetland/dredge and fill permitting program and does not use its CWA § 401 water quality certification program to protect wetlands or streams from dredging and filling. The removal of federal CWA § 404 authority over so-called "isolated" wetlands and other waters, and headwater tributaries such as ditches, ephemeral streams and intermittent streams, will leave these waters unprotected from dredge and fill activity at both the federal and state levels.

The Utah Department of Environmental Quality (UDEQ) and the Utah Water Quality Board have the legal authority to enforce water quality standards -- including antidegradation standards and protection of designated uses -- in waters of the state, including wetlands. Utah could use its Utah Pollution Discharge Elimination System (UPDES) permitting program to enforce its water quality standards in wetlands. However, Utah has indicated no intention to do so. In addition, Utah's water programs are already considered under-funded and Utah is currently struggling with a budget deficit. Program expansion to fill regulatory gaps left by a CWA rollback seem highly unlikely at this time.

In addition, Utah's definition of waters of the State excludes "bodies of water confined to and retained within the limits of private property." This exclusion seems to preclude state regulation of discharges of dredged and fill material into many smaller and seasonal wetlands and waters located on private property. The UPDES program regulating pollutant discharges still applies to these confined waters as long as they are "waters of the United States" under the CWA. However, the UPDES program may not apply to these waters if CWA jurisdiction is rolled back.

3. Only A Few of These 32 States Have Any Independent State Coverage for Adjacent Wetlands and Headwaters

Only a few of the 32 states lacking "isolated" wetlands permitting programs have any independent state authority to regulate dredge and fill activity in tributaries and adjacent wetlands. Such authority is found in various state zoning, land use, drainage, and water pollution control laws, and is generally not comprehensive in scope. California, Delaware, Hawaii, Indiana, Nebraska, North Dakota, South Carolina, and Washington may have some limited regulatory authority to protect some tributaries and their adjacent wetlands. See, Kusler, Jon, The *SWANCC* Decision and State Regulation of Wetlands (2001) (http://aswm.org/fwp/*SWANCC*/aswm-int.pdf) at 9; Delaware, Indiana and Washington summaries, supra.

A CWA rollback will leave many adjacent wetlands and headwater tributaries, as well as "isolated" wetlands, vulnerable to drainage, dredging, channelization, and filling, even in these states with limited permitting authority. The EPA estimate of headwater stream miles, supra at IV-C-1, demonstrates that, on average, 54% of the Nation's stream miles are 1st order streams, and 80% are 1st and 2nd order streams. All of these streams and their adjacent wetlands are placed at risk by the ANPRM proposal to roll back CWA jurisdiction.

4. Even States that Have Independent Dredge and Fill Permitting Programs that Cover "Isolated" Wetlands and Headwaters Are Not Capable of Protecting All Wetlands and Waters Removed from CWA Jurisdiction.

Most of the 18 states with independent permitting programs that ostensibly include "isolated" waters and headwaters within their scope of regulation still lack the authority and/or the capability to fully protect many of the wetlands and waters they would be put at risk by a CWA jurisdictional rollback. These states are: Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, Pennsylvania, Maryland, Virginia, Florida, Michigan, Minnesota, Oregon, Wisconsin, North Carolina, and Ohio.

Many of these state permitting programs are limited in scope because of statutory and regulatory exemptions that exclude certain waters and/or certain activities in those waters from regulation. For example, New York generally only protects wetlands larger than 12.4 acres in size, leaving many smaller, seasonal wetlands at risk. Michigan dredge and fill laws generally exempt lakes and ponds with a surface area less than 5 acres, exempt virtually all noncontiguous wetlands located in counties with populations less than 100,000, and exempt virtually all noncontiguous wetlands that are 5 acres in size or less. Minnesota exempts certain agricultural dredge and fill activities and fills to certain seasonal and shallow water wetlands, depending upon the federal program to regulate these discharges.

A second critical limitation is the vulnerability of both existing and emerging state permitting programs to political and legal attack by development interests, including road builders, home builders, agriculture, and mining interests, in the absence of a CWA federal floor. Ohio's new wetlands law was rendered largely ineffective during the legislative process that led to its enactment. North Carolina's wetlands program has been under attack in the courts ever since it was promulgated. Remarkably, a bill has been introduced in the current legislative session to eliminate the positions of the two most experienced regulators in the North Carolina permitting program. Virginia's new wetlands law was immediately challenged in court.

A related limitation is "no more stringent than" provisions in state law or policies that preclude the state from promulgating regulatory controls that are more stringent than those required by the CWA. Even though these provisions generally should not preclude regulation in waters of the state that are no longer considered "waters of the United States," these provisions will be used as a political tool for a state rollback of regulatory authority that mirrors the CWA rollback. See subsection 7, below. In Michigan, one of two states that have assumed the federal CWA § 404 program, a CWA jurisdictional rollback based on *SWANCC* has already limited the federal leverage that existed pre-*SWANCC* to convince Michigan to close its "isolated" waters loophole in order to make its assumed program fully consistent with the CWA.

Perhaps the most significant limitation on the effectiveness of all these programs, particularly in the current economic environment, is a lack of financial and technical resources to mount effective permit review, monitoring, and enforcement. In Minnesota, for example, severe budget cuts to eliminate a very sizable state budget deficit have resulted in extreme cuts in state wetlands regulatory program resources. The withdrawal of Corps and EPA funding and staffing from these states will only exacerbate the resource scarcity in these programs. Ohio's new wetlands program was inadequately funded from the outset due to budget constraints and will almost surely lose additional resources because the program is funded from general funds and the state is facing a huge budget deficit.

The selected state-by-state summaries presented below demonstrate that many of the 18 states with independent wetlands regulatory programs are unlikely to be able to fully fill the regulatory gap left by a CWA rollback.

a. Northeast Region

New York

While many of New York's wetlands and streams will not be left completely unprotected, many of the state's smaller wetlands, the wetlands most likely to be left out of federal protection, are at high risk of being developed. The state of New York generally protects only wetlands that are larger than 12.4 acres and some smaller wetlands of unusual local importance. Wetlands greater than one acre in size are protected within the Adirondack State Park. Agricultural drainage is generally exempt from New York's wetland protection law. Many New York State wetlands previously regulated under the CWA will be left vulnerable to development and pollution if CWA jurisdiction is rolled back. A CWA rollback will also remove the federal "floor" that supports New York's wetlands protection program and expose that program to political attempts to weaken state protections.

New York law requires a permit for dredge, fill, and other bed and bank disturbances in its "protected streams," i.e., those with higher use classifications. However, New York law appears to leave some streams without protection from dredge, fill, and other bed and bank disturbances. Moreover, state dredge and fill protections for certain streams are not aggressively enforced. Absent the CWA § 404 permitting requirement, which alerts project proponents to the need for a state permit, many of these dredge and fill activities would likely go unregulated.

Though New York has programs in place to protect certain wetlands and streams, the state budget is limited already and New York is grappling with a budget deficit of at least $1 billion. Governing Magazine (May 2002). Taking on additional regulatory responsibilities to protect those wetlands and headwaters left vulnerable by a CWA rollback is not likely. In fact, the state of New York will lose 50 of its 350 regulatory staff in the next year due to budget cuts.

Pennsylvania

Pennsylvania's Clean Streams Law and Dam Safety and Encroachments Act, and accompanying regulations, provide broad authority to the Pennsylvania Department of Environmental Protection (DEP) to regulate discharges of pollutants, including dredge and fill material, as well as other activities, in all waters of the Commonwealth, including "isolated" wetlands, ponds, springs, ditches, and ephemeral and intermittent streams. The Dam Safety and Waterways Management program incorporates wetland water quality standards, and the water quality standards incorporate the permitting standards from the Dam Safety and Waterways Management program. Those permitting standards are similar to those required by the CWA.

Weaknesses in Pennsylvania's wetlands and waterways protection program lie in the implementation of permitting standards. One particular concern is DEP's reliance on the state-sponsored Wetland Replacement Fund (Fund) to compensate for wetland losses from smaller projects. The Fund collects an average of $10,939 per wetland acre impacted, where the average mitigation design and installation cost is an estimated $58,000 per acre, and is roughly $85,000 per acre for forested wetlands. The fees charged by the Fund are not sufficient to provide for land acquisition, in particular, which limits the ability of DEP to provide for proper siting and design of mitigation projects. In addition, DEP subsidizes the Fund, creating a strong disincentive for project proponents to either avoid wetland impacts altogether, or undertake more costly, but more ecologically beneficial, project-specific compensatory mitigation. While the individual impacts of these smaller projects may be small, the cumulative loss of wetlands and wetlands function is considerable, and these losses are not being adequately compensated for through the Fund.

Pennsylvania's water programs are also weakened by exemptions ("waivers") and general permits for certain activities. In particular, "waiver 2" in the Dam Safety and Waterways regulations exempts stream encroachment activities in streams and floodways with a drainage area of 100 acres or less. These unregulated activities have resulted in significant damage to headwater streams, particularly in areas of the Commonwealth experiencing intense development pressures. Developers expand the buildable area of land parcels by burying segments of streams. Stream channelization and culverting is being done under this waiver to build road and bridge crossings. Similarly, the Dam Safety and Waterways regulations relax permitting procedures and standards for private residential construction in wetlands through general permit 15.

Another weakness in the Pennsylvania state program is its delegation of responsibility to county conservation districts (CCDs) without sufficient funding and support to ensure adequate CCD resources and expertise to effectively protect Pennsylvania's at risk waters. While DEP presently limits its CCD delegation to general permit activities, it could expand its delegation in the future.

Finally, Pennsylvania has at least a $500 million budget deficit that make it unlikely that the state will fund additional resources that would allow the DEP to effectively compensate for the loss of Corps and EPA resources attendant to a CWA rollback. Governing Magazine (May 2002).

b. Great Lakes Region

Ohio

Ohio's wetlands regulatory program has historically been based on its CWA § 401 water quality certification program. State water quality standards recognized all waters, including all wetlands. In the wake of *SWANCC*, the Ohio Environmental Protection Agency (OEPA) attempted to assert independent state jurisdiction over so-called "isolated" wetlands. The agency found that the state had the legal authority to issue rules that would create a permitting program for "isolated" wetlands impacts independent of its CWA § 401 authority, and that until such rules were in place, no impacts could occur to "isolated" waters. Rather than support state wetlands jurisdiction, the regulated community challenged OEPA's authority and sought the help of the state legislature. The state legislature quickly passed an "isolated" wetlands bill which weakened existing protection for "isolated" wetlands in July 2001.

The new "isolated" wetlands law, heavily influenced in the legislature by the regulated community, ostensibly creates an independent state permitting program for "isolated" wetlands where a CWA § 404 permit and a § 401 certification are not required, but actually weakens the previously existing CWA protections for "isolated" wetlands by requiring the approval of most "isolated" wetland fills of ½ acre or less through a general permit. The law also categorizes wetlands according to ecological significance and requires significantly weaker permit review and permit criteria for many wetlands based on ecological category and size. The methodology being used to categorize wetlands tends to give low value scores (and therefore almost no real protection) to so-called "isolated" wetlands based on their typically smaller size and the very fact that they lack an obvious surface water connection. Consequently, while on paper Ohio has a wetlands program that regulates discharges in so-called "isolated" wetlands, in reality Ohio offers very minimal protection for these at risk waters.

Even if Ohio were inclined to fill the regulatory gap left by a CWA rollback, its wetlands and waters programs are inadequately funded to do so. OEPA believed it needed seven full time equivalent (FTE) positions to adequately staff this program in fiscal year 2002, yet it only had funding for four FTE's. In its first annual report on its "isolated" wetlands permitting program, OEPA reported that, "with only four FTEs available to conduct reviews, work efforts within the program are being hampered and review times for projects are increasing." The agency also reported that, "due to staffing levels, budget constraints and statutory review time requirements, the program was unable to follow up on the majority of these [thirty-eight illegal fill] complaints. A limited number of complaints regarding isolated wetlands were investigated."

The report notes that 60 percent of the cost of the program comes from the General Revenue Fund (GRF), leaving the wetlands program highly dependent on state tax revenues that have declined in FY 2002 and 2003, and highly vulnerable to GRF funding cuts. Prospects for FY 2004 are even worse. Ohio is facing a budget deficit that exceeds $500 million. Governing Magazine (May 2002). OEPA does not currently have adequate resources to staff its permitting program for "isolated" wetlands and all indications point to cuts in this program in FY 2004 and FY 2005.

Michigan

Michigan is one of only two states to assume the CWA § 404 dredge and fill permitting program from the Corps of Engineers and EPA. Consequently, Michigan has an independent state dredge and fill permitting program that generally covers wetlands, lakes, and streams. However, the Michigan dredge and fill laws generally exempt lakes and ponds with a surface area less than 5 acres, exempt virtually all noncontiguous wetlands located in counties with populations less than 100,000, and exempt virtually all noncontiguous wetlands that are 5 acres in size or less.

In addition to these exemptions of certain wetlands, lakes, and ponds, Michigan law includes exemptions for agriculture, silviculture, ranching, iron and copper processing, drainage ditches, utility lines, and oil and gas pipelines that are broader than exemptions provided for under § 404 of the CWA. These exemptions leave many smaller Michigan wetlands, lakes, and ponds vulnerable to dredging and filling.

Withdrawal of federal CWA § 404 jurisdiction will remove the federal "floor" supporting the current Michigan dredge and fill program and will likely expose it to attempts to further weaken state dredge and fill protections. Indeed, in the process of reviewing Michigan's assumed § 404 program before the *SWANCC* decision, EPA was urging Michigan to close its existing "isolated" waters loophole to make the program more fully consistent with the CWA. *SWANCC* weakened the federal leverage to urge these program improvements; a broader CWA rollback would eliminate it altogether. See, 68 Fed. Reg. 772 (January 7, 2003).

In addition, Michigan's dredge and fill program has suffered in the past from staff reductions and reduced enforcement and is unlikely to fully recover from those cut backs now when the state is struggling with a budget deficit in excess of $1 billion. Governing Magazine (May 2002).

Wisconsin

Wisconsin has had for some time a strong wetlands permitting program based on state water quality standards for wetlands and the state's CWA § 401 water quality certification authority. Recognizing that *SWANCC* would severely limit its § 401 authority over so-called "isolated" wetlands, Wisconsin responded quickly to *SWANCC*, enacting new legislation in May 2001 extending its pre-existing water quality certification program to "non-federal" wetlands. Wisconsin's new law essentially maintains the wetland protection status quo in the state, extending the state's certification authority only to those "non-federal wetlands" over which the Corps no longer takes § 404 jurisdiction based on the *SWANCC* decision.

While Wisconsin seems to have a relatively effective program for protecting its wetlands now, it is unclear whether Wisconsin will have the resources and commitment to further expand its state program if CWA jurisdiction is withdrawn from additional waters. Wisconsin is dealing with a budget deficit in excess of $250 million and may not be able to fund further regulatory program expansion. Governing Magazine (May 2002).

Minnesota

Minnesota has its own state wetlands law independent of its CWA § 401 certification authority. Ostensibly, Minnesota's Wetlands Conservation Act (WCA) regulates the full range of wetlands in the state, including "isolated"wetlands. However, WCA and its regulations exempt a number of activities that often occur in so-called "isolated" wetlands. These exemptions were put in place at least in part because the Corps was requiring a CWA § 404 permit for these activities in wetlands, including "isolated" wetlands. After *SWANCC*, the Corps is no longer regulating these activities in "isolated" wetlands, and Minnesota cannot, leaving a gap in regulation of so-called "isolated" wetlands.

Minnesota's Board of Soil and Water Resources (BWSR), which administers WCA, has conducted its own analysis of post-*SWANCC* regulatory gaps and concluded that absent federal CWA jurisdiction, many of Minnesota's small, seasonal wetlands will be left unregulated, particularly in the Prairie Pothole Region and other regions of the state with the greatest historical wetland losses. These wetland losses will be even more pronounced if intermittent streams and their adjacent wetlands are assumed to no longer qualify as waters of the United States. In 2001, BWSR presented an informal proposal to modify its exemptions and close this regulatory gap. The proposal was tabled in light of resistance from regulated interests.

In addition to WCA's exemptions, WCA program effectiveness is limited by political and resource constraints. First, WCA is administered by local government units with state agency oversight. Many of these local governmental units lack the staff expertise and resources to conduct careful permit review and impose sufficiently protective permit conditions. Second, the state's budget crisis has severely cut funding for wetland and stream permitting programs at both the state and the local level. Minnesota is currently cutting BWSR funding to address a budget deficit in excess of $25 million. Governing Magazine (May 2002).

c. Pacific Northwest Region

Oregon

Oregon has a strong statutory and regulatory regime that should allow it to protect "isolated" wetlands and smaller streams in the absence of federal regulation. Under the 1989 state wetlands law, local governments are encouraged to prepare local wetlands conservation plans, plans which are approved by the state Division of State Lands under specified statutory criteria. Permits are required from the state for the removal or fill of wetlands in any area subject to such a plan. The statute requires that such proposals must be consistent with applicable wetlands conservation plans, be designed to minimize impacts, and fully replace impacted resources through mitigation. There appears to be no minimum size threshold for regulated wetlands, so even small seasonal wetlands appear to be regulated. Oregon's permitting program requires compensatory mitigation for any wetlands impacts and includes permitting standards that are similar to CWA § 404. Oregon is considering assumption of the CWA § 404 program from EPA and the Corps. In addition, the Corps and EPA are delegating to Oregon responsibility for dealing with wetlands under 2 acres in size under a programmatic general permit.

However, regular hostile legislative initiatives, barriers to citizen enforcement, and a state budget crisis raise questions about the effectiveness of Oregon's permitting program in the absence of a federal regulatory floor. While there is currently no law in Oregon that caps state standards to the limit of federal law, such bills are regularly introduced in the state legislature. In addition, Oregon is in an economic crisis and there is significant pressure to loosen environmental regulations that are seen as constraining job growth. For example, the state cattlemen's associations have been promoting a bill to repeal all state regulation over wetlands. Another pending bill would remove state jurisdiction over any wetland smaller than one acre.

While Oregon does provide for citizen enforcement of many of its wetlands and waters provisions, the law now makes unsuccessful citizen groups liable for the attorneys' fees of the defendants. This single act has significantly curtailed citizen enforcement of state water resources law. The state Attorney General's office has also begun to take the position in litigation that only those entities with a direct economic interest in a permit have standing to enforce it, which would preclude most enforcement actions from conservation groups or concerned citizens.

Finally, enforcement at the state agency level is typically under-funded and a low priority. Unless a development activity poses a very serious environmental problem, or there are numerous citizen complaints, enforcement of permit violations is said to be rare. Oregon is also facing a budget deficit in excess of $500 million and seemingly unlikely to expand its state programs to regulate additional waters left unregulated by the Corps and EPA. Governing Magazine (May 2002).

Much of eastern Oregon is high desert, and hence virtually all of the water resources in the Eastern part of the state could be classified as "isolated" or "intermittent." Such streams and wetlands are of great ecological importance in a desert environment. Despite what seems to be a strong state regulatory program, the CWA federal floor is needed to ensure protection of these valuable water resources.

d. Southeast Region

Virginia

Virginia has historically relied on its CWA § 401 certification program to regulate discharges to its non-tidal wetlands. In 2000, the Virginia General Assembly removed the dependence of the state nontidal wetlands program on its CWA authority, enabling the Department of Environmental Quality (DEQ) to independently regulate activities in wetlands, including "isolated" wetlands, even when the Corps does not regulate them under CWA § 404. The regulations implementing this new law came into full effect October 1, 2001.

However, the effectiveness of the Virginia regulatory program is limited by court challenges, political controversy, and limited resources. The new state law was almost immediately challenged in both state and federal court. Despite the unambiguous legislative approval of independent state wetlands regulation with broader jurisdiction than that afforded by the CWA after *SWANCC*, the U.S. District Court for the Eastern District of Virginia effectively negated the intent of the Virginia law by erroneously concluding that it is limited to "coextensive jurisdiction" with federal law. This conclusion is completely contrary to the language, goals, and history of the 2000 legislation, and is currently on appeal in the Fourth Circuit U.S. Court of Appeals. United States v. Newdunn Associates, 195 F. Supp. 2d 751 (E.D. Va. 2002), *appeal pending,* No. 02-1594 and 02-1480 (4th Cir.). Meanwhile, conservation groups are concerned that DEQ is not requiring the avoidance and minimization of wetland impacts, but simply requiring mitigation.

Budget constraints are also a concern, since Virginia is grappling with a budget deficit in excess of $1 billion. Governing Magazine (May 2002). Even if Virginia's wetland program can overcome its legal and political hurdles, it is unlikely that Virginia will fund an expansion of program resources to address a CWA rollback beyond the minimum dictated by *SWANCC*.

North Carolina

North Carolina now appears to have an independent state wetlands regulatory program that protects so-called "isolated" wetlands, though its regulatory authority and effectiveness are by no means a foregone conclusion. In 1996, North Carolina promulgated wetland water quality standards and procedures applicable to its CWA § 401 water quality certifications, especially for Corps § 404 permits. The state attorney general determined that North Carolina's Environmental Management Commission (EMC) has independent authority to enforce its wetland water quality standards where CWA § 401 water quality certifications are not required. North Carolina's wetlands rules were immediately challenged by development and farming interests, who took their challenge all the way to the North Carolina Supreme Court. The North Carolina Court of Appeals rejected the rules challenge in late 2002 and the North Carolina Supreme Court followed suit in late March 2003.

Following *SWANCC*, the EMC expressly extended the state wetlands rules to "isolated" wetlands by promulgating temporary "isolated" wetland rules that became effective in October 2001. The EMC made these "isolated" wetlands and waters rules permanent in the fall of 2002, subject to legislative approval in early 2003. Until then, the temporary "isolated" wetlands and waters rules remain in effect.

Most recently, a North Carolina legislator introduced a bill targeting by name two of the most experienced regulators in the North Carolina wetlands permitting program, requiring the elimination of their jobs. Bruce Henderson, Charlotte Observer (April 10, 2003). The North Carolina wetlands program can hardly be effective in the face of such attacks. A CWA federal floor helps to shield state programs from such political vulnerability. A CWA rollback from so-called "isolated" wetlands and headwaters will result in increasing state program vulnerability to this type of legislative attack.

In addition to legal and legislative challenges, North Carolina's wetlands permitting program is hampered by limited resources. North Carolina is dealing with a budget deficit in excess of $500 million. Governing Magazine (May 2002). Already understaffed state environmental agencies are being asked now for up to 3 percent additional cuts for the current budget year. Even in a state like North Carolina where some legal jurisdiction over so-called "isolated" waters and headwaters has been upheld, the resources to enforce that jurisdiction is sorely lacking.

Florida

Florida retains considerable state statutory authority to implement wetland permitting programs to protect "at risk" waters. Florida's Department of Environmental Protection (DEP) has considerable legal authority to enforce water quality standards -- including antidegradation standards -- in broadly defined waters of the state, expressly including wetlands and "isolated" wetlands. Florida also has independent state authority to require permits for pollution discharges in state waters and on its submerged lands.

Weaknesses in Florida's permitting programs include a broad exemption from wetland regulation in the Florida Panhandle counties. In response to *SWANCC*, Escambia County in the Florida Panhandle acted on its own to close the Panhandle wetlands exemption, adopting an ordinance requiring additional county review of building plans in wetlands, including "isolated" wetlands. Florida law also exempts various agriculture, silviculture, and horticulture activities, as well as certain activities deemed to be minimal in individual and cumulative environmental impact.

The effectiveness of Florida's permitting programs is further reduced by the delegation of permitting authority to Florida's five water management districts, which have their own permitting rules and which vary in program implementation. While the St. Johns River Water Management District (WMD) is viewed as implementing a relatively comprehensive and protective program applicable to virtually all wetlands and streams, including intermittent streams, the same is not said for the other water management districts. Florida law also permits delegation of permitting authority to local governments.

Florida's mitigation requirements, as applied by several of the WMDs, are also viewed as less protective than those required by the Corps and EPA under the CWA. In particular, unlike the Corps and EPA, Florida's WMDs typically do not require permit applicants to pursue practicable alternatives to site development in wetlands. Florida permitting rules also provide little protection for uplands surrounding wetlands habitat used by threatened and endangered species.

The weaknesses in Florida's permitting programs are exacerbated by a daunting budget deficit in excess of $1 billion. Governing Magazine (May 2002).

5. States Are Unlikely to Effectively Harness Existing Authority Or Enact New Authority to Protect Wetlands and Headwaters In the Wake of a Federal CWA Rollback.

The 32 states that currently lack any independent state permitting programs protecting "isolated" waters are highly unlikely to launch effective programs in the wake of the *SWANCC* decision and the ANPRM. While many states have latent authority to enforce water quality standards or other state water pollution control statutes, most of them have relied exclusively on the CWA-based § 401 certification and § 402 NPDES permitting programs to enforce these underlying state laws. Without CWA § 401 jurisdiction, few states will be able to establish a permitting program to limit dredge and fill activity in waters withdrawn from CWA jurisdiction.

States that attempt to launch independent state permitting programs to enforce their existing water quality standards and other state water pollution control laws are being challenged legally and politically at every turn in attempts to ensure that any CWA rollback constitutes a state rollback as well. There is every indication that this trend will continue when and if additional states chart this course. Efforts to thwart regulatory gap-filling efforts in both Indiana and North Carolina illustrate this trend.

States are finding it even more difficult to enact entirely new wetlands and waters permitting statutes to fill the regulatory gaps left by *SWANCC* and likely to be left by any new Corps and EPA rulemaking. As discussed above, wetlands bills introduced to fill regulatory gaps in the aftermath of *SWANCC* have already failed in several states, including California, Illinois, and Delaware.

As discussed in state summaries above, budget constraints are another key reason why it is highly unlikely that states will fill the regulatory gap left by a CWA rollback.

6. State Capability to Protect Wetlands, Headwaters, and Downstream Waters from Pollutant Discharges Will Be Substantially Weakened If CWA Jurisdiction is Removed from Wetlands and Headwaters.

Most state surface water pollution permitting programs are closely linked to the CWA NPDES/402 authority. While they are based on independent state statutes and regulations, those statutes and regulations were in many cases enacted or amended to ensure that they met CWA NPDES standards. In some states, such as Arizona and Idaho discussed above, the waters to be regulated under the state program are expressly limited to federal "waters of the United States." Any withdrawal of CWA jurisdiction will almost certainly be followed immediately by a withdrawal of state PDES regulation as well. Additional state PDES permitting programs are subject to "no more stringent than federal law" provisions that arguably could limit the waters protected under the state program. See subsection 7, below.

Even where independent state authority to regulate broader waters of the State is clear, the absence of a federal CWA "floor" exposes state pollution control standards to attacks from pollutant dischargers seeking to limit state regulation to those waters still regulated as "waters of the United States" under the CWA.

7. "No More Stringent" Laws Turn Federal Baselines Into State Ceilings, Further Limiting States' Capacity to Fill the Regulatory Gaps Left By a CWA Rollback.

In addition to the other limitations on state regulatory authority and resources described above, many states have statutes or regulations that either prevent or limit the ability of state resource protection agencies from adopting environmental standards more stringent than the minimum required by federal environmental statutes and regulations. Such provisions could, in some instances, be used to limit the waters protected under the state program, turning what was intended under the Clean Water Act to be the federal "floor" of protection into the "ceiling."

Examples of many of these "No More Stringent" laws are provided below.[47] In many cases, these state laws are not retroactive (or do not appear to be so), or they otherwise may not result in an automatic restriction in the waters protected by state law and regulations even if EPA and the Corps attempt to limit the waters covered by federal regulations.

But even where independent state authority to regulate broader waters of the state is clear, polluters and development interests will almost certainly renew their attacks on states' regulatory authority and seek to limit state regulation to those waters still defined as "waters of the United States" under federal regulations. This would likely restart the "race to the bottom" among states that the Clean Water Act itself was meant to end when it came to protection of the country's water resources.

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[47] For another discussion of state "no more stringent" laws, see Environmental Law Institute "Enforceable State Mechanisms for the Control of Nonpoint Source Water Pollution," 1997, Appendix A (available at http://www.epa.gov/nps/elistudy/).

Broad "No More Stringent" Laws

Although some state "No More Stringent" laws are media- or resource-specific (e.g., restricting enactment of more stringent hazardous air pollutant standards than the federal standards), the laws in several states generally prohibit their state environmental agencies from enacting any regulation more stringent than the federal laws or regulations.[48]

Some states have enacted legislation unconditionally restricting their agencies from promulgating any environmental regulations more stringent that federally required. South Dakota's law prohibits the state from enacting rules that are either more stringent than federal required or that cover "an essentially similar subject or issue."[49] This law not only covers all areas of federal environmental regulation, but it is so broad that it could be read to try to block any state regulation in an area where a federal program exists on an issue even if it is entirely voluntary. Alaska law provides that state regulations addressing areas governed by federal laws or regulations may not be more stringent than most federal laws and regulations. [50] Kentucky limits agency authority to promulgate regulations to only when such regulations are "required by federal law" and any then "shall be no more stringent than the federal law or regulations."[51] Tennessee invalidated all environmental requirements placed upon municipalities or counties that are more stringent than federal rules.[52]

Water-Pollution Related "No More Stringent" Laws

Arizona Rev. Stat. Ann. § 49-255.01, which establishes the state's pollutant discharge elimination system program, prohibits the director from promulgating rules more stringent than those found either in that statute itself or in the Clean Water Act. Virginia prohibits its state water pollution rules from being more stringent than federal regulations under the Clean Water Act.[53] Florida has a similar provision, but includes a procedure for granting exceptions.[54] In addition to its more general probation on state regulations more stringent than federal, Kentucky law specifically prohibits "any effluent limitation, monitoring requirement, or other condition which is more stringent than" federally required.[55]

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[48] Jerome M. Organ, Limitations on State Agency Authority to Adopt Environmental Standards More Stringent than Federal Standards: Policy Considerations and Interpretive Problems, 54 Md. L. Rev. 1373, 1376 (1995).

[49] South Dakota Cod. Laws. Ann. 1-40-4.1.

[50] AK Stat. Ann. § 46.03.365.

[51] Ky Rev. Stat. Ann. § 13A.120(1) (Baldwin 1988 & Supp. 1994).

[52] Tenn. Code Ann. § 4-5-225.

[53] Va. Code Ann. § 62.1-44.15:1 (Michie 1993).

[54] Fla. Stat. Ann. § 403.804(2) (West 1993).

North Carolina prohibits effluent standards applicable to animal or poultry feeding operations from exceeding federal minimums.[56] While Iowa prohibits state effluent standards from being more stringent than a federal effluent standard, the state allows agencies to establish standards for sources that the EPA has not.[57] Oregon bars its agencies from restricting effluent limitations upon nonpoint sources of pollutant discharge resulting from forest operations unless mandated under the federal Clean Water Act.[58] Idaho restricts its agencies from creating water pollution regulations more stringent than the Clean Water Act.[59]

Both Arkansas[60] and Iowa[61] authorize their state agencies to impose more stringent source-specific standards than the Clean Water Act, but only to the extent necessary to assure compliance with the Act's water quality standards. Nebraska has a "no more stringent" statute regarding the Safe Drinking Water Act[62] and Alabama restricts state regulations regarding wellhead protection areas from being more stringent that EPA standards.[63]

Exceptions to the State's Own "No More Stringent" Law

Some states only allow their agencies to promulgate or adopt environmental regulations more stringent than those federally required if they meet heightened evidentiary burdens or special procedures.

Montana provides an exception to its "no more stringent" restrictions if there is a finding after public hearing and detailed study that such rules are necessary.[64] Maine requires a more detailed and complex set of justifications and more procedural review if the state intends to adopt more stringent regulations than the federal requirements.[65] Florida has a similar provision, and further requires approval by the governor and cabinet after review of a cost/benefit analysis.[66]

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[55] Ky. Rev. Stat. § 224.16-050.

[56] N.C. Gen. Stat. 143-215.

[57] Ia. Code Ann. 455B.173.

[58] Ore. Rev. Stat. 468B.110(2).

[59] Id. Code 39-3601.

[60] Ark. Code Ann. § 8-4-207(1)(A) (1989).

[61] Iowa Code Ann. § 455B.173.2 (1993).

[62] Neb. Rev. St. § 81-1505 (22).

[63] Ala. Code § 22-36-7 (1993).

[64] Mont. Code Ann. 75-5-203, -309, 80-15-110.

Oklahoma requires an economic impact analysis for environmental rules more stringent than corresponding federal requirements.[67] Ohio requires more disclosure and review for restrictions above the federal minimums.[68] Pennsylvania and Maryland have Executive Orders requiring a compelling state interest or an independent legislative justification to support any deviation from federal standards.[69] Wisconsin has a similar policy promulgated by its Natural Resources Board and Utah has a similar legislative requirement.[70]

North Dakota prohibits agencies from adopting rules more "stringent than corresponding federal regulations or adopt rules where there are no corresponding federal regulations" unless there is a written finding after public comment and hearing based upon evidence in the record, that corresponding federal regulations are not adequate to protect public health and the environment of the state."[71]

Mississippi has a "no more stringent" rule relating to water quality and discharge guidance, but allows a state agency to promulgate regulations in the absence of federal standards when "necessary to protect human health, welfare or the environment."[72] West Virginia allows for the Division of Environmental Protection to promulgate more stringent rules than the counterpart federal rule or program "reasonably necessary to protect, preserve or enhance the quality of West Virginia's environment or human health or safety."[73] However, "[i]n the absence of a federal rule, the adoption of a state rule shall not be construed to be more stringent than a federal rule, unless the absence of a federal rule is the result of a specific federal exemption."[74]

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[65] 38 Maine Rev. Stat. Ann. 341-D.

[66] Fla. Stat. 403.061(7)(31), 403.804(2) (1993).

[67] Okla. Stat. Tit. 27A, § 1-1-206.

[68] Ohio Rev. Stat. 121.39.

[69] Penn. Exec. Order 1996-1.

[70] Wis. Board Pol. 1.52(3) and Utah Code Ann. 19-5-195.

[71] N.D. Code § 23-01-04.1.1; see 54 Md. L. Rev. 1373, 1386.

[72] Mississippi Code 49-17-34(2).

[73] W. Va. Code § 22-1-31 (1994).

[74] *Id.*

Utah has several media-specific statutes prohibiting promulgation of regulations "more stringent than the corresponding federal regulations" absent "a written finding after public comment and hearing, . . . that the corresponding federal regulation is not adequate to protect public safety and the environment."[75] The Tennessee Government Operations Committee has the authority to invalidate rules that impose "environmental requirements or restrictions on municipalities or counties that are more stringent than federal statutes or rules on the same subject, and that result in increased expenditure requirements on municipalities or counties beyond those required to meet federal requirements unless" funds have been appropriated to cover the increased expenditures.[76]

Colorado allows water quality controls to be more stringent than the "corresponding enforceable federal requirements" only if it is demonstrated at a public hearing and there is a written finding with scientific or technical evidence showing that more stringent state rules are necessary to protect the public health, beneficial use of water, or the environment of the state.[77] Iowa only places limitations on the state agency's authority to promulgate more stringent water quality controls when the EPA has promulgated "an effluent or pretreatment standard pursuant to §§ 301, 306 or 307 of the federal Water Pollution Control Act."[78]

C. OTHER FEDERAL REGULATORY AND INCENTIVE-BASED PROGRAMS OFFER LITTLE PROTECTION TO FILL GAPS LEFT BY LOSS OF CWA JURISDICTION.

While there are numerous incentive-based programs on the national level that promote the acquisition, protection, restoration, or enhancement of certain types of waters, these programs were never contemplated as replacements to broad, federal regulatory protection. As a result, the programs are insufficiently funded, usually limited to certain types of waters, and not comprehensive in their protections.

1. Swampbuster

One Federal program that prevents a significant amount of wetland conversion (though it does nothing to halt point source discharges of pollutants and does little to protect streams) is Swampbuster. A "disincentive" provision included in the Food Security Act of 1985, and re-authorized as part of every Farm Bill since, Swampbuster requires producers who receive farm subsidies, loans, or certain other benefits to refrain from continued drainage of wetlands on farms they own or operate. Violators risk the loss of their program benefits. Since the Food Security Act contains its own definition of "wetlands," the *SWANCC* decision has had no effect on Swampbuster implementation. However, there are many limitations to the effectiveness of

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[75] Utah Code Ann. § 19-5- 105(1), (2) (1993).

[76] Tenn. Code Ann. § 4-5-225 (1994).

[77] Colo. Rev. Stat. Ann. § 25-8-202(8)(a) (1994).

[78] Iowa Code Ann. § 455B.173.2 (1990).

Swampbuster as a "backstop" to loss of Clean Water Act protections. These are discussed below.

Applies Only to Agricultural Activities

One of the major limits to Swampbuster as a backstop to loss of Federal Clean Water Act protections is that, even if it were completely successful at halting conversion of wetlands to agriculture (which it isn't), it would still only apply to agricultural conversions of wetlands. The most recent U.S. Fish and Wildlife Service publication, "Status and Trends of Wetlands in the Conterminous United States 1986 to 1997," estimates that only 26 percent of freshwater wetland losses were due to agriculture, while 51 percent were due to urban or rural development (Dahl, 2000). Swampbuster can do nothing to halt the 74 percent of wetland losses that are not caused by agricultural activities.

Applies Only to Wetland Conversion

Swampbuster does little to halt the destruction of non-wetland waters for agricultural purposes. Producers are free to channelize, pipe and/or armor streams or ditches without incurring violations of Swampbuster. Further, as a wetland conservation program, Swampbuster does not address point source discharges of pollutants or oil spill liability in any type of waters.

Many Loopholes

Pressure from producers for "flexibility" in implementation of Swampbuster led to amendments in the 1990 and 1996 farm bills to allow producers to drain wetlands under certain "minimal effects" and "minimal effects with mitigation" exemptions. These special exemptions were designed to allow producers to drain so-called "nuisance" wetlands -- wetlands that were preventing them from turning their tractor around, entering certain fields, etc. However, as implemented, the minimal effects exemptions are quite broad. Reliance on "mitigation" of wetland impacts through restoration of wetlands elsewhere is likely resulting in a significant net loss of wetlands as NRCS has little experience with wetland mitigation and anecdotal evidence seems to indicate that mitigation projects mostly involve creation of ponds in upland areas.

Lack of Enforcement

Very few producers have lost federal benefits for violations of Swampbuster. That does not mean to imply that violations do not occur. In fact one of the biggest complaints associated with the Swampbuster program is that it is not well enforced, leaving "cheaters" to benefit and those who abide by the restriction at a competitive disadvantage. The penalties for violating the provision are not severe enough to serve as a disincentive to many producers. Since 1990, if a producer converts a wetland for the purpose of crop production, they may lose USDA program benefits only until the wetland functions are "restored." If the Farm Service Agency determines that the violation was made unintentionally, they may grant a "good faith" exemption. If such an exemption is granted, then the NRCS will help the landowner develop an acceptable mitigation plan to restore the wetland functions, which must be completed within one year. If correctly implemented and all conditions are met, the landowner will not lose program benefits. A soon to be released study by the General Accounting Office will examine the effectiveness of Swampbuster. It is widely expected to reveal a dismal record of compliance and enforcement.

Is Not Tied to All Federal Benefits

A damaging legislative precedent was set in 1999, when Congress passed a four-year, more than $ 6 billion crop insurance subsidy bill which did not require recipients to comply with Swampbuster. This de-coupling of Swampbuster compliance from crop insurance subsidies created a perverse incentive for producers to convert wetlands to production -- even wetlands which would otherwise not prove economically viable to convert. The desire by many in Congress and the Administration to move producers away from direct subsidies to agricultural producers puts in question the future of Swampbuster, as crop insurance and potentially other de-linked programs become the major delivery mechanisms for assistance to producers.

2. Wetlands Reserve Program

The Wetland Reserve Program (WRP), offers landowners the means and the opportunity to protect, restore and enhance wetlands on their property through a voluntary program administered by the USDA Natural Resource Conservation Agency.

The WRP was mandated by § 1237 of the Food Security Act of 1985(PL99-198) and amended by subsequent farm bills in 1990, 1996 and 2002. Since its enactment, the program has made a major contribution toward restoring wetlands and contributing to the goal of "no net loss" of wetlands. At the close of FY 2002 1,276,619 acres, involving 6,791 projects were under easement. However, actual wetland acres protected may be significantly less because program rules permit up to 6 acres of non-wetland buffer area for each acre of wetland.

We are fully supportive of WRP and urge continued increases in program levels. However, despite WRP's value in allowing restoration of formerly drained wetlands, we take exception to the suggestion that the program will provide significant protection to those "isolated" wetlands under the threat of destruction. We offer the following points:

The majority of acres enrolled in WRP were areas that were not previously subject to 404 permit requirements. They are areas that had been significantly manipulated for agricultural production prior to 1985, have lost much of their wetland values, and, in fact, are no longer classified as wetlands. On balance WRP has become a wetland restoration program rather than one that protects current wetlands needing no restoration or enhancement. WRP acres and 404 permit acres in the majority of cases are different areas. Consequently, WRP has little impact on protecting "isolated" wetlands.

Funding levels are inadequate. The Administration's proposed budget for FY 2004 caps the enrollment acres at 178,000. This is 72,000 acres less that authorized in the 2002 farm bill. In FY 2002, 4 eligible acres were offered for every acre enrolled, amounting to over 700,000 acres of potential easements that went unfunded. Interest in the program is high but limited funds and a low probability of getting acres enrolled is discouraging program participation.

Land offered for WRP tend only to be areas that are limited in their economic value. They tend to be marginal farming areas producing limited income. They are not those wetland that are most threatened by development. WRP cannot compete in the market where land values significantly exceed agricultural values.

The average WRP contract exceeded 180 acres in FY 2002. Larger areas are given preference in order to control administrative and future oversight demands to assure proper operation and maintenance. It is understood that some of these large areas may include several small wetland strung together in a single contract. The fact remains that the huge number of small wetlands representing an extremely important waterfowl habitat but limited acreage is not being addressed by WRP.

Most WRP acreage is land that was drained for agriculture, but failed to become productive for agriculture. It is much more cost effective and ecologically desirable to prevent such wetlands from being drained in the first place than to pay farmers to restore them later.

Not all wetlands restored under the WRP program are protected in perpetuity. Currently, 77 percent are in permanent easements, 16 percent in 30-year easements, and 7 percent in 15-year agreements (Harry Slaughter - NRCS, personal communication).

3. Other Farm Bill Conservation Programs

Several other Farm Bill conservation programs provide incentives to restore or protect wetlands. The Wildlife Habitat Incentives Program provides some funding for cost-share agreements to restore wetlands and in-stream habitats, however only about 10 percent of the funds for this program are used for aquatic habitats. The Conservation Reserve Program and Conservation Reserve Enhancement Program (along with the state CREP match) provide some funding for the restoration and enrolment of wetlands and some riparian habitats in conservation easements. However, the majority of CRP funds are spent on upland habitats and most easements in these programs are short-term. The Continuous sign-up Conservation Reserve program also provides funding for riparian restoration, however agreements are for only 10-15 years. None of these programs protects waters from point-source discharges of pollutants, though some are designed to reduce non-point source pollution. These programs, while supported by our organizations for their value in providing some wildlife habitat and filtration of run-off, are of little value as backstops to loss of Clean Water Act protections.

4. Partners for Fish and Wildlife

This program, administered by the U.S. Fish and Wildlife Service has helped to restore 574,800 acres of wetlands and 4,190 miles of streamside and in-stream habitat since 1987 (Martha Naley – USFWS, personal communication). While we are highly supportive of the program, and hope that it receives the requested $9.6 million increase in funding for the FY04 budget, wetlands and streams restored through this program are not usually protected by a legal mechanism, thus are vulnerable to future development projects. Additionally, none are protected from point-source discharges of pollutants. As such, the program, even if given additional funding, will never serve as a significant backstop for loss of regulatory protection.

5. Coastal Wetlands Restoration Program

The Coastal Wetlands Conservation grant program has awarded $32 million to 23 coastal States and 1 U.S. Territory. Through this grant program 40,000 acres of coastal wetlands have, or will be, acquired, protected, or restored. However these are coastal wetlands that are hopefully not at risk of losing jurisdiction under the Federal Clean Water Act, therefore it provides no backstop to the loss of Clean Water Act protections for nontidal waters. Further, with a major movement underway to raise federal funding to restore coastal Louisiana, it is important to ensure that any public investment in this worthy effort is not undermined by accelerated drainage of wetlands and channelization of streams in the upper reaches of the Mississippi River or within Louisiana itself – which maintains no state level program to protect wetlands independent of Clean Water Act authority.

6. National Estuary Program

The National Estuary Program was established by Congress in 1987 to improve the quality of estuaries of national importance. The Clean Water Act, § 320 directs EPA to develop plans for attaining or maintaining water quality in an estuary. This includes protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on water, requires that control of point and nonpoint sources of pollution to supplement existing controls of pollution. Several funding mechanisms are available. This significant and valuable public investment in restoring and maintaining the health of our nation's estuaries will be significantly undermined if upstream waters that provide fresh water to these estuaries are contaminated or degraded.

7. National Wildlife Refuge System

The National Wildlife Refuge System, in its 100 years of operation has protected some very key wetland habitats across the nation as refuges and waterfowl production areas. Nationally, about 35-40 percent of the refuge system's 95 million acres (including waterfowl production areas) is some type of aquatic habitat (Ken Grannemann – USFWS, personal communication). However, new acquisition is not proceeding very rapidly as full funding of the Land and Water Conservation Fund has yet to occur. In fact, the President's budget request for FY 04 represents about a 60 percent cut in funding for refuge acquisition despite his promise to fully fund the LWCF (Jim Waltman – The Wilderness Society, personal communication). Chronic under-funding of refuge operations and maintenance programs also prevents many refuge-owned areas from being restored as wetlands, though the President's request for an increase in this funding level for FY04 is certainly welcomed by our groups.

While the wetlands already protected within the refuge system enjoy fairly good protection from dredge and fill activities, it is not anticipated that new acquisitions will increase significantly within the next few years, nor do we anticipate that the small, scattered wetlands and headwater streams most at risk from a change in Clean Water Act rulemaking will be targeted for acquisition within the refuge system due to the difficulty in managing such scattered units. Additionally, due to resource extraction activities on refuges and lack of protection for many upstream waters, refuge waters could be increasingly vulnerable to pollution. Indeed, according to the personal experience of National Wildlife Federation Board Member, Gerome Ringo, (personal communication) many Louisiana refuges are being contaminated with oil leaking from wells on the refuges. Without § 311 or OPA protections for these waters, liability for cleanup of these spills would lie with the taxpayers.

8. 5 Star Restoration Program

With average grants that run about $10,000 per project, the 5 Star Restoration Program is more effective at leveraging local funding and labor for stream and wetland restoration and clean up programs than it is a major force for long term conservation of aquatic systems. While the program has achieved impressive results with small amounts of funding, no long-term protection mechanisms are required to ensure that the progress is not eventually reversed.

9. North American Wetlands Conservation Act

Through the North American Wetlands Conservation Act, approximately 3.5 million acres of wetlands and associated uplands have been affected across the United States since 1989. Of these, about 978,130 acres have been acquired through fee title transactions and another 796,844 acres are under easement, and the rest not protected by any long term mechanism. Exact records are not available regarding how much of the total acreage affected is wetland or other aquatic habitat (as opposed to "associated upland"). However the Fish and Wildlife Service estimates that about 25 percent of the acreage affected is aquatic habitat, with the remaining 75 percent in associated uplands. Thus about 244,532 acres of wetlands and other aquatic habitats have been acquired and another 199,211 acres of wetlands are under some type of easement. About 205,072 acres of wetlands/aquatic habitats have been restored and 275,00 acres of wetlands/aquatic habitats have been enhanced for waterfowl use (Joe Moteo – USFWS, email and personal communications 4/10/03). While still impressive, these numbers are easily undermined by past and anticipated accelerated future losses of wetlands and other aquatic habitats to development and agriculture and their potential pollution from point and non-point source discharges of pollution.

Like other programs, including the Western Hemisphere Shorebird Reserve Network, that target waterbird conservation within the United States, the NAWCA emphasizes the protection of areas that receive seasonally large concentrations of birds, even though many species make routine use of small, "isolated" wetlands. These areas are frequently single sites found along migratory routes (Haig *et al.* 1998). Even though many species make use of multiple, smaller wetlands, protection is rarely afforded to these smaller complexes. Birds are highly mobile, and move, often relatively frequently, between multiple sites. Haig *et al.* (1998) discusses that protecting only one single wetland (which is frequently the case with both NAWMP and WHSRN) ignores that fact that individuals make frequent movements between sites. Additionally, most areas are managed specifically for target species, thus the entire range of wetland functions, or even habitats, is not considered. Furthermore, few streams are protected through this funding.

D. CONCLUSION - FEDERAL AND STATE PROGRAMS ARE INADEQUATE BACKSTOPS

As documented above, there is not – by any stretch of the imagination – a serviceable safety net to backstop protections provided by the Clean Water Act to all our nation's waters. The extremely spotty protections that exist on the state and federal level are wholly insufficient to prevent a backslide of the progress we have made as a nation over the past 30 years in cleaning up the nations waters. Furthermore, without a sea change in state and other federal programs, there is no prospect for such a safety net to develop any time in the foreseeable future. Any contraction of jurisdiction under the Clean Water Act will have measurable, deleterious effects on the health of our nation's waters.

VIII. IMPLICATIONS OF THE CONTEMPLATED JURISDICTIONAL ROLLBACK FOR FEDERAL REGULATORY PROGRAMS

The hitherto unquestioned jurisdictional reach of the CWA provides the legal bedrock on which a great number of federal regulatory programs are founded. Some of these are authorized by other provisions of the CWA, others have independent statutory bases. In all the cases discussed below, any retrenchment of CWA jurisdiction can be demonstrated to lead inexorably to reductions in environmental and/or human health protection in other regulatory programs.

A. CLEAN WATER ACT PROGRAMS

1. Oil Pollution Prevention and Response Under CWA § 311 and the Oil Pollution Act

a. Overview of oil pollution protections under the Clean Water Act

Preventing oil pollution from damaging the nation's waters and harming public health, wildlife, and the economy has been a concern of Congress since long before passage of the Clean Water Act in 1972. The Rivers and Harbors Act of 1899 prohibited the discharge of oil and other refuse matter from vessels. The Oil Pollution Act of 1924 prohibited "discharges of oil by any method…into or upon the coastal waters of the United States," unless permitted as not "deleterious" to health or seafood in regulations issued by the Secretary of War. Prior versions of the Federal Water Pollution Control Act dating back to 1966 also contained prohibitions on the discharge of oil into the navigable waters of the U.S.

On June 22, 1969, a floating oil slick on the Cuyahoga River was ignited by welding sparks and burst into flames, damaging two railroad trestles. This particular fire on the Cuyahoga captured public attention and galvanized national support for passage of the Clean Water Act in 1972.[79]

b. Section 311 of the Clean Water Act

The centerpiece of § 311 is the congressional declaration that "it is the policy of the United States that there should be no discharges of oil or hazardous substances into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone."[80] In order to implement this policy, Congress enacted a prohibition on discharges of oil or hazardous substances into waters of the U.S. "in such quantities as may be harmful as determined by the President." 311(b)(3). The amount of spilled oil necessary to be harmful to the environment is very small. It includes discharges that "(a) Violate applicable water quality standards; or (b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines."[81] In addition, Congress mandated a series of oil spill planning, prevention and cleanup measures.

Key provisions in §311 include:

- Mandatory self-reporting of any discharge of oil or a hazardous substance by the owner or operator of a discharging facility or vessel. § 311(b)(5)
- Authorization for the assessment of administrative penalties against the owner or operator of a discharging facility who fails to comply with cleanup provisions of § 311 (311(b)(6));
- A non-discretionary duty for the President to "issue regulations ...establishing procedures, methods, and equipment and other requirements for equipment to prevent discharges of oil and hazardous substances from vessels and from onshore facilities and offshore facilities, and to contain such discharges..." § 311(j)(1) This provision is the source of EPA's authority for requiring subject facilities to develop, maintain and update Spill Prevention, Control and Countermeasure (SPCC) Plans.

In addition, under § 311, Congress established the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), the federal government's blueprint for responding to both oil spills and hazardous substances releases.[82]" The NCP "has given rise to regional and local plans that govern in some detail the official response to oil and hazardous substance spill contingencies."[83]

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[79] A fire on the Cuyahoga in 1952 caused $1.5 million in damages. Property damage was not the only threat posed by river fires caused by floating oil slicks. In 1952, a low hanging kerosene lamp on a tugboat ignited vapors "lying above an extensive accumulation of petroleum products spread over the surface" of the Schuylkill River, killing a sailor aboard the tug. See Kernan v. American Dredging, 355 U.S. 426, 427 78 S.Ct. 394, 395, 2 L.Ed.2d 382 (1958).

[80] Section 311 of the 1972 amendments to the FWPCA was largely drawn from the Water Quality Improvement Act of 1970.

[81] 40 C.F.R. § 110.3

Section 311(d) authorizes the U.S. to take summary action "whenever a marine disaster in or upon the navigable waters of the United States has created a substantial threat of pollution hazard to the public health or welfare of the United States, including, but not limited to, fish, shellfish, wildlife and the public and private shorelines and beaches. In addition, § 311(e) authorizes the President to require the U.S. attorney in the relevant judicial district to seek judicial relief to abate any "imminent and substantial threat." Finally, §§ 311 (f) and (g) provide for the allocation of cleanup costs to the responsible owner or operator of a facility, including natural resource damages.

c. The Oil Pollution Act of 1990

In January 1988, a 4-million gallon oil storage tank split apart and collapsed at an Ashland oil storage facility in Floreffe, Pennsylvania. Approximately 1 million gallons of the released diesel oil ran into an uncapped storm drain that emptied directly into the Monongahela River. The spill moved through Pennsylvania, West Virginia and Ohio, polluting both the Monongahela and Ohio River ecosystems. Drinking water sources for an estimated 1 million people in Pennsylvania, West Virginia and Ohio were temporarily contaminated. Thousands of birds and fish were killed as a result of the spill.[84]

In March 1989 the Exxon Valdez spilled 10.8 million gallons of crude oil in Prince William Sound Alaska, killing an estimated 250,000 seabirds, 2,800 sea otters, 300 harbor seals, 250 bald eagles, up to 22 killer whales, and billions of salmon and herring eggs,[85] and costing hundreds of millions of dollars in damages to sportsfishing and tourism.[86]

Chiefly in response to these disasters, Congress passed the Oil Pollution Act of 1990 ("OPA 90"). OPA 90 both amended and supplemented § 311 of the Clean Water Act. The law increased EPA's authority to pursue administrative, judicial and criminal penalties for violations of the regulations and for discharges of oil and hazardous substances. In addition, OPA 90 requires certain facilities to develop plans for responding to a worse case discharge or the substantial threat of such a discharge. This requirement lead to the development of regulations for Facility Response Plans (FRPs).[87]

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[82] See EPA's Oil Program website at http://www.epa.gov/cgi-bin/epaprintonly.cgi.

[83] William H. Rodgers, Jr., *Environmental Law: Air and Water* (1986), p 521.

[84] *See* the GAO report requested by Senator Arlen Specter, Inland Oil Spills: Stronger Regulation and Enforcement Needed to Avoid Future Incidents (February 1989) GAO/RCED-89-65.

[85] Q&A from the Exxon Valdez Oil Spill Trustee Council (http://www.oilspill.state.ak.us/facts/qanda.html)

[86] *Id.*

OPA 90 also created a unified federal fund, called the Oil Spill Liability Trust Fund (OSLTF), to pay for the cleanup and other costs of federal oil spill response authorized at $1 billion, far higher than any of the other funds previously authorized. The Fund makes payments to federal, state and Indian tribe trustees to carry out natural resource damage assessments and develop plans to restore, rehabilitate, replace or acquire equivalent natural resources; as well as pay claims for uncompensated removal costs and damages. The Fund is administered by the Coast Guard's National Pollution Funds Center.

Although the Valdez and Ashland spills were the high profile spills that pushed Congress to act to strengthen protections for the nation's waters against oil pollution, they were only two of the thousands of spills that had occurred in the previous years. Between 1980 and 1986, some 80 to 91 million gallons of oil spilled into U.S. waters[88] and according to GAO, between 1980 and 1989 there were 3,910 oil spills form land-based pipelines that released nearly 20 million gallons of petroleum into U.S. waters, nearly twice as much as was released by the Exxon Valdez spill.[89] Congress had full knowledge of the scope of oil spills across the country and acted accordingly in strengthening the Clean Water Act in order to improve the federal capability to implement the existing prohibitions on unpermitted discharges of oil into the nation's waters or onto their shorelines. Congress took no steps to restrict the historic understanding of the scope of the Clean Water Act in 1990, nor to reverse court decisions that interpreted the scope of § 311 broadly to include small, non-navigable and non-perennial streams and tributaries.[90]

d. Courts have interpreted the scope of §311 of the Clean Water Act broadly

While the Cuyahoga River, Prince William Sound and Monangahela River are all traditionally navigable waters, the phenomenon of oil spills, and their damage to water quality and wildlife has never been limited to these waters. And, as courts have found repeatedly over the years, Congress did not intend to limit the protective scope of the Clean Water Act only to discharges of oil directly into traditionally navigable waters.

In United States v. Ashland Oil and Transportation Co., 364 F. Supp. 349 (1973), Ashland was charged with failing to report a discharge of 3,200 gallons of crude oil from a pipeline into a small non-navigable stream, tributary to Little Cypress Creek, under 311(b)(5). Ashland argued that the stream was not "waters of the United States" because it was not navigable and it did not have a sufficient connection to interstate commerce to be regulated by the federal government under the Commerce Clause. The district court rejected Ashland's argument, stating:

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[87] 59 FR 34070 (July 1, 1994).

[88] NRDC, "No Safe Harbor: Tanker Safety in America's Ports" (1990).

[89] GAO Pollution from Pipelines: DOT Lacks Prevention Program and Information for Timely Response, (January 1991) GAO/RCED-91-60.

[90] See U.S. v. Ashland Oil and Transportation Co., 504 F.2d 1317 (1974); United States v. Texas Pipe Line Co., 611 F.2d 345 (1979).

> "The facts before this Court clearly indicate that the discharge of pollutants into this stream, and the water quality of the stream itself, have a substantial effect upon and connection with interstate commerce. However, this Court is of the opinion that in prosecutions under this Act, the government is not required to establish the effect on interstate commerce of any particular discharge or of any particular stream. The legislative history of the Act is laden with reports, references and statements supporting the widely accepted conclusion that water pollution is a national problem severely affecting the health of our people, the welfare of the nation and the efficient conduct of interstate commerce.

With knowledge of this problem firmly in mind, Congress legislated a regulatory scheme for *"all waters* in the United States..." Ashland 364 F.Supp at 351 (emphasis in original)

The district court was upheld by the Court of Appeals for the Sixth Circuit. The court relied heavily upon the extensive stipulation of facts filed by the parties. The stipulation stated that Little Cypress Creek was a tributary to Cypress Creek which was itself a tributary to Pond River and Pond River was, in turn tributary to the Green River, a navigable-in-fact water. The parties further stipulated that the quality of water in Little Cypress Creek affected the produce of the farms that it drains and to which it supplies water. U.S. v. Ashland Oil and Transportation Co., 504 F.2d 1317, 1320 (1974).

In an extended and thorough discussion of the entire Clean Water Act and its legislative history, the Court of Appeals concluded that "Congress' clear intention as revealed in the Act itself was to effect marked improvement in the quality of the total water resources of the United States, regardless of whether that water was at the point of pollution a part of a navigable stream." Ashland Oil, 505 F.2d 1317, 1323. The court also carefully examined the serious impacts pollution from upstream, non-navigable sources can ultimately have on traditionally navigable waters. "Obviously water pollution is a health threat to the water supply of the nation. It endangers our agriculture by rendering water unfit for irrigation. It can end the public use and enjoyment of our magnificent rivers and lakes for fishing, for boating, and for swimming. These health and welfare concerns are, of course, proper subjects for congressional attention because of their many impacts upon interstate commerce generally. But water pollution is also a direct threat to navigation – the first interstate commerce system in this country's history and still a very important one." Ashland at 1325-1326.

The court took judicial notice of repeated fires on both the Rouge and Cuyahoga Rivers and observed: "Such pollution is an obvious hazard to navigation which Congress has every right to seek to abate under its interstate commerce powers." The court made clear its understanding of the connection between "upstream" pollution of non-navigable waters and their impacts on downstream navigable waters: "It would, of course, make a mockery of those powers if its authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. The navigable part of the river could become a mere conduit for upstream waste." Ashland at 1326

A similar issue was addressed in United States v. Texas Pipe Line Company, 528 F. Supp. 728 (1978). That case involved the spilling of 575 barrels into an unnamed tributary of Caney Creek in Atoka County, Oklahoma. Texas Pipe Line challenged its liability for the discharge, in part, on the grounds that the discharge of oil was not into "navigable waters of the United States" within the meaning of the Clean Water Act.

The district court noted that Caney Creek joins Clear Boggy Creek which in turn drains into the Red River. Although the record indicated that the unnamed tributary that received the discharge was flowing at the time of the discharge, it was not established whether Caney Creek, Clear Boggy Creek or the Red River were flowing at the time of the discharge. Texas Pipe Line, 528 F.Supp at 731. Texas Pipe Line contended that for the discharge to be jurisdictional under the Act, the government had to prove that the unnamed tributary, Caney Creek, Clear Boggy Creek and the Red River were all flowing into each other at the time of the discharge into the unnamed tributary.

The court rejected defendant's claim, finding that the Act's provisions applied to "the tributaries of navigable waters and this is so regardless of whether there is a continuous flow of water from the point of an oil spill, through any intermediate tributaries and eventually into navigable waters at the specific time of the spill."

The district court's decision was upheld by the Court of Appeals for the Tenth Circuit, holding that "it makes no difference that a stream was or was not at the time of the spill discharging water continuously into a river navigable in the traditional sense." United States v. Texas Pipe Line Co., 611 F.2d 345, 347 (1979).

Thus, in the context of oil spill pollution, federal courts have long held that discharges into non-navigable tributaries, including intermittent or ephemeral tributaries, are subject to the jurisdiction of the Clean Water Act. The judicial opinions by the Courts of Appeals discussed above are still good law. There is nothing in the holding of *SWANCC* to suggest that the Supreme Court intended, in ruling narrowly on an assertion of jurisdiction based solely upon use by migratory birds, to sweep away thirty years of jurisprudence addressing Congress' intent or authority to prohibit and prevent discharges of oil and other pollutants into waters of the United States, including those that are non-navigable, intermittent or ephemeral, man-made, or lacking a direct surface connection to downstream waters.

e. An Ongoing Flood of Oil Spills

The few reported cases involving discharges of oil into waters of the United States are just the tip of the iceberg in considering how many such spills actually take place around the country. EPA recently estimated in testimony before Congress that there are approximately 24,000 oil spills each year, and "well over half" of those occur within the inland zone. In addition, the agency estimated that "[o]n average, one spill of greater than 100,000 gallons occurs every month from oil storage facilities and the entire transportation network."[91] Many of these spills are into or near waters placed at risk for loss of Clean Water Act protection by a rulemaking or already improperly abandoned under the direction of the Guidance.

The principal source for tracking the number, type, location and effects of oil spills across the country is the Emergency Response Notification System or "ERNS" database. The ERNS database is limited in several fundamental respects: it is based upon initial reports of spills and is rarely updated or amended based upon later information; because the information is typically provided by the owner or operator of the facility, there is some incentive to downplay the seriousness of the spill. Nevertheless, even the imperfect anecdotal information provided by ERNS provides a useful snapshot of the types of oil spills that persist across the nation, and the importance and value of the Clean Water Act's requirements for SPCC plans and Facility Response plans as well as the liability trust fund for states, federal authority to recover cleanup costs from liable owners or operators of facilities, and federal authority to collect penalties and conduct facility inspections.

Here are just three of the spills described in the ERNS database from 2002[92]:

On December 19, 2002, 7,500 gallons of Number 2-D fuel oil discharged from an oil/water separator when a tank truck operator accidentally filled the oil/water separator instead of the facility's holding tank. 3,000 gallons of the material entered French Creek in Avon, Ohio.

On January 10, 2002, 1,300 gallons of number two fuel oil was spilled in Memphis, TN. The material was in a generator fuel tank, when the inline fuel filter popped off and allowed the material to release. The material overflowed secondary containment, flowed across a parking lot, and proceeded to enter a storm drain, which drains into the Loosahatchi River.

On January 9, 2002, 2,500 gallons of number two fuel oil were discovered to have spilled from a storage tank when the valve malfunctioned. The failed valve caused one tank to pump into a second tank, which caused the second tank and secondary containment to overflow. An unknown amount of the material has entered the storm drain, which drains into the Old Muggy River.

The ERNS database also contains reports that illustrate the benefits of the Clean Water Act's requirements for SPCC plans, secondary containment structures, and facility response plans. For example, in Galesburg, Illinois, on January 28 of this year, 40,000 gallons of fuel oil was released from a storage tank due to a pipe failure. All the material was reportedly released into secondary containment and there were no offsite impacts.

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[91] Testimony of Timothy Fields, Jr. Assistant Administrator, Office of Solid Waste and Emergency Response before the Subcommittee on Water Resources and the Environment of the Committee on Transportation and Infrastructure, U.S. House of Representatives, February 9, 2000.

[92] Reports from the ERNS database can be viewed at the website of the National Response Center as National Response Team Incident Summaries. *See* http://www.nrc.uscg.mil/insum.

One of the most prominent weaknesses of the ERNS database and the National Response Summaries is that they rarely report on the damages to water, land, wildlife and public health caused by the spills. To our knowledge, no comprehensive repository of such damage assessments is available. Nevertheless, it is well understood that the consequences of oil spills for wildlife can be devastating. According to EPA, "in the United States there are more than 70 spills reported on an average day. When oil spills occur, plants and animals will be contaminated and some will be unable to survive. Whether they occur in oceans, estuaries, rivers, lakes, ponds, or on land, they can affect algae, plants, invertebrates, fish, amphibians and reptiles, birds, and mammals. These species and communities are at risk of smothering, hydrocarbon toxicity, hypothermia, and chronic long-term effects."[93]

However, it is possible to gain insight into the costs of a small number of spills by consulting alternative sources including the EPA Oil Spill Program's own Oil Spill Program Update. The newsletter includes reports of some of the spills reported from EPA's regional offices across the country. These reports sometimes contain descriptions of fish kills and other harm to wildlife, threats to drinking water supplies and, occasionally injury or death to nearby citizens. For an example of the latter, see the July and October 1999 Updates, describing three fatalities resulting from the Olympic pipeline leak of 277,000 gallons of fuel and subsequent explosion along Whatcom Creek in Bellingham, Washington on June 10, 1999.

In addition, we believe that each of EPA's regional offices is likely to have many spill reports, photographs and other records that would themselves paint a powerful portrait of the extent to which oil spills pose a persistent threat to the integrity of the nation's waters as well as their harm to public health and wildlife.

In short, 30 years after the passage of the Clean Water Act, there is an ongoing epidemic of oil spills across the country. Spills into wetlands, seasonal streams and non-navigable tributaries continue to harm public health and the environment. In light of this reality, it defies common sense or understanding that the agencies would even contemplate withdrawal of existing Clean Water Act protections from any of the nation's waters.

f. Current Legal Challenges to the New SPCC Rules

SPCC plans are the regulatory centerpiece of the Oil Program's effort to meet the goal of § 311 to prevent oil spills from storage facilities into (or near) the nation's waters. The initial regulations requiring certain facilities to develop Spill Prevention, Containment and Countermeasure (SPCC) plans to prevent any discharge of oil into or upon navigable waters of the United States or adjoining shorelines date from 1973.[94] Although proposed revisions and clarifications were published by EPA in 1980, 1991, 1993 and 1997[95], an update to the original SPCC rules was only finalized in July 2002.[96] For a facility to be subject to the SPCC rule it must 1) be non-transportation-related; 2) must have an aggregate aboveground storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons; and 3) there must be a reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines.[97]

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[93] EPA Office of Emergency and Remedial Response, "Understanding Oil Spills and Oil Response" p.21, (December 1999) EPA 540-K-99-007

In addition to the written spill prevention plans, SPCC regulations contain provisions for covered facilities to use various methods of preventing and controlling oil spills including: tank leak detection systems, spill/overfill protection, pipe external protection, secondary containment, as well as formal training of employees.

EPA has determined that a facility's compliance with even one of four SPCC provisions: (1) tank leak detection systems; (2) spill/overfill protection systems; (3) pipe external protection; and (4) secondary containment "had a significant effect on reducing the annual number of oil spills, the annual total volume of oil spilled, the annual total costs of cleaning up the spilled oil, and the degree of off-site migration."[98]

The American Petroleum Institute (API), Marathon Oil, and the Petroleum Marketers Association have filed legal challenges against the July 17, 2002 SPCC rule. In their complaints, both API and Marathon Oil argue that the revised SPCC rule reaches too far, regulating facilities that are outside the scope of the Clean Water Act. In its complaint, API argues that, "[u]nder the reasoning of the Supreme Court, necessary to its decision in *SWANCC*, the term 'navigable waters' extend only to waters that are, have been, or could reasonably be made, navigable in fact ('traditional navigable waters') and wetlands adjacent to traditional navigable waters." API further asserts that, because the definition of "navigable waters" in the 2002 SPCC rule includes waters that "lie across the border of two states" or whose "'use'" could affect interstate or foreign commerce, it is in excess of the Administrator's authority under the Clean Water Act.

Marathon Oil does not base its assertion that EPA has overstepped its jurisdictional authority on the *SWANCC* decision. Rather, it simply asserts that the definition of "navigable waters" "extends only to waters that are, have been, or could reasonably be made, navigable in fact

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[94] 38 FR 34164 (December 11, 1973).

[95] 56 FR 54612 (October 22, 1991), 58 FR 8824 (February 17, 1993), 62 FR 63812 (December 2, 1997).

[96] 67 FR 47042 (July 17, 2002).

[97] US EPA, *Spill Prevention, Control and Countermeasure (SPCC) Regulation: A Facility Owner/Operator's Guide to Oil Pollution Prevention* (undated).

[98] US EPA, *Results of 1995 Survey of Oil Storage Facilities (July 1996), "Analysis of the Effectiveness of EPA's SPCC Program on Spill Risk*" p. 4.

('traditionally navigable waters') and wetlands adjacent to navigable waters." Marathon then asserts that because the definition of "navigable waters" in the SPCC rule reaches beyond traditionally navigable waters and their adjacent wetlands, that the rule exceeds the Administrator's authority under the Clean Water Act.

Thus, API and Marathon Oil are reading the Supreme Court's holding regarding the assertion of jurisdiction over intrastate, non-navigable, "isolated" waters solely upon their use by migratory birds as justification for removing all federal protections from oil spills for all waters that are not traditionally navigable, including interstate waters. This is, of course, an extreme and absurd reading of both the *SWANCC* decision and the intent of Congress.

Perhaps even more troubling than the legal claims filed by API and Marathon Oil concerning the jurisdiction of the CWA is the fact that EPA has taken comment upon a proposal to postpone the compliance deadline for the regulatory provisions of the 2002 SPCC rule for at least one year, and entered settlement discussions with the plaintiffs that could, among other things, "resolve" the issue of the SPCC rule's jurisdiction.

If the argument of API, Marathon Oil, and all the other regulated industries that seek to escape the Clean Water Act's requirements, is accepted by EPA and the Corps in settlement discussions, or in the course of a rulemaking on the definition of "waters of the United States," or by a federal court as a result of litigation, the effectiveness of the oil spill provisions of the Clean Water Act will be dramatically curtailed as previously regulated facilities abandon or fail to adopt spill prevention measures and response plans. In addition, the oil spill cleanup and restoration costs for states could increase, as they arguably would no longer have access to the oil spill trust fund to reimburse cleanup costs for spills into waters that are no longer considered "waters of the United States."

The jurisdictional claims of API and Marathon Oil are without merit. EPA should vigorously contest the oil industry's challenge to the agency's jurisdiction under the Clean Water Act.

g. Potential Impacts of Withdrawing Jurisdiction for Prevention of Oil Spills: Some Questions to Consider

We are concerned that EPA has not thoroughly considered the potential consequences of withdrawing Clean Water Act authority, including the provisions of § 311, from currently-protected waters. Considering only the withdrawal of provisions of § 311 from any of the waters that have historically been protected under the Act raises significant questions. For example, for spills into waters no longer protected (or their adjoining shorelines), will mandatory reporting requirements still apply? If not, is there a substitute mechanism in place to ensure that some state or federal authority is notified of the spill? Will EPA retain authority to conduct cleanups that pose an imminent and substantial hazard as it currently does under § 311(d)? Will EPA retain the authority to recover cleanup costs, including natural resource damages, from owners or operators for discharges into non-jurisdictional waters?

Will states and tribes be able to obtain reimbursement through the OSLTF for the costs of clean up and restoration of waters (including natural resource damages) polluted by oil spills that are no longer considered "waters of the United States?" Will EPA retain authority to levy administrative penalties, or collect civil or criminal penalties for future discharges into non-jurisdictional waters? Will EPA have inspection authority for facilities that are no longer sufficiently close to jurisdictional waters to pose a reasonably likely threat of discharge? How will the national, regional and local contingency planning structures be affected by withdrawal of jurisdiction from a large class of the nation's waters?

Based upon the litigation discussed above, we anticipate that any change to the existing rules governing jurisdiction of § 311 will result in aggressive litigation by the oil industry and others to interpret the "new" definition of "waters of the United States" as narrowly as possible. The regulated community could argue that, for any spills that occur in waters no longer considered "waters of the United States," none of the provisions of 311 apply. Has EPA thoroughly considered the consequences for the environment of opening up this Pandora's box?

What will be the likely effects on the economy and the environment from increased and unregulated oil spills? What harm does the agency anticipate for the public, either via fires and explosions from oil on our waters, or from poisoning of drinking water supplies? What will be the impacts to wildlife, including threatened and endangered species of increased oil spills? How will water-dependent businesses and local, state, regional and national economies be affected by oil spills threatening the viability of recreational waters, waters containing fish and shellfish, and waters that draw tourism?

What will be the costs paid by the American taxpayer? In our view, it seems likely that taxpayers could suffer at both the state and federal levels. Federal authority to recover cleanup costs directly from the owner or operator responsible for spills into waters of the United States could shrink along with the scope of the definition of waters of the U.S. As a result, the citizens whose water may increasingly be fouled by oil spills will be required to foot more of the bill for cleaning up those oil spills into "isolated" waters.

We urge EPA to consider these questions seriously and fully evaluate the potential consequences of withdrawing existing Clean Water Act protections from oil spills for an unspecified number of the nation's waters.

h. Oil Pollution in the United States: Back to the Future?

If EPA abandons protection from oil spills for an undetermined class of wetlands, streams, ponds and other waters, oil pollution in traditionally navigable waters is sure to increase. Future spills into headwaters, intermittent streams, non-navigable tributaries or wetlands, whether or not they are arbitrarily and unscientifically classified as "isolated" by EPA and the Corps, will ultimately flow back down into the pseudo-protected "traditionally navigable waters." Eventually, the oil will reach the Cuyahoga, Rouge and Monangahela Rivers and hundreds of other navigable rivers, bays and other waters, possibly even Prince William Sound. There they will poison drinking water, kill wildlife and, possibly, burst into flame. We will have come full circle.

2. Implications for Clean Water Act § 401 Certification Program

Prior to enactment of the Federal Water Pollution Control Act (FWPCA) Amendments of 1972, federal efforts to control water pollution primarily centered on assisting states in the identification and attainment of water quality standards. Difficulties in establishing scientifically reliable and legally defensible abatement requirements for point sources led Congress to shift the focus of water pollution control efforts to technology-based effluent limitations. The pre-1972 water quality standards system was preserved, however, both as a measure of program effectiveness and as a guide to the extensive water quality planning process established by the CWA. Water quality standards also serve as a secondary tool for regulating point source discharges.

Section 401 fits into this scheme by requiring "any applicant for a Federal license or permit for conducting any activity . . . which may result in any discharge to the navigable waters" to secure from the state in which the discharge originates a certification that the discharge will comply with several provisions of the CWA related to effluent discharge limitations and water quality standards. If the state denies water quality certification, the federal permitting agency may not, regardless of other considerations, grant the applicant a permit for the proposed activity. The states' most important role in the § 401 certification process – because the states may not impose their own technology based effluent limitations and performance standards unless they are more stringent than EPA's requirements – is to determine whether an applicant for a federal license or permits has demonstrated compliance with state water quality standards and, if not, to deny or "condition" certification so that the activity will comply with those standards.

In addition to dramatically limiting the reach of the 402, 404, and TMDL programs, restricting the jurisdiction of the Act will cripple the states' ability to manage their waters when affected by federally permitted or licensed activities. And the states covet their § 401 authority. Last summer, for instance, the Western Governors' Association unanimously passed a policy resolution which makes it abundantly clear how much the Western states rely on their ability to condition federally permitted projects to prevent state water quality standards from being violated by federal activities.[29] As the Western Governors noted last summer in response to proposed amendments to the CWA that would have limited the reach of § 401:

> [s]tate involvement in administration of the Clean Water Act is essential to assure that local goals are met at the same time that water quality is protected. States consider land use, economic development, and other locally-adopted policies in their decisions regarding the allocation of the privilege to discharge waste. Normally, no one discharger is given the privilege to use up all the capacity of a water body to assimilate potential discharges; to do so would result in prohibitive pollution-abatement costs for other potential dischargers, thereby curtailing much desired development. . . .
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[29] Western Governors' Association, Policy Resolution 02-04, *State Authority Regarding the Federal Hydropower Licensing Process*, June 25, 2002.

> Congress should refrain from weakening or removing a vital tool for states to influence [federally permitted and licensed activities] within their borders and upon their waters. ***Section 401 of the CWA is operating as it was intended and should be retained without amendment.***
>
> ***Certification authority under § 401 of the CWA is especially important at this time.*** Our states are working closely with federal and private partners to restore fish populations under the Endangered Species Act and, in the face of consent decrees, to develop total maximum daily (pollutant) loads (TMDLs) for discharges into state waters so as to bring them into compliance with water quality standards. It almost goes without saying that by eliminating coverage under 401 for so called "isolated" waters and wetlands or for intermittent and ephemeral waters and wetlands, the administration will undermine the states' ability to restore endangered fish species and balance pollutant loadings under the CWA's TMDL program. But it hasn't gone without saying: the Western Governors have clearly signaled in this unanimous, non-partisan resolution that maintaining the reach and authority of § 401 is a very high priority for them.

But the importance of the water quality certification authority is not limited to the Western states. The National Association of Attorneys General adopted a resolution in the spring of 1998 in response to proposed amendments to the CWA's § 401, and could not have been more clear, resolving that the National Association of Attorneys General:

> Reaffirms NAAG's support as expressed in the 1991 resolution for the States' broad authority in certifying federally licensed projects' compliance with state programs authorized under the Clean Water Act;
>
> Supports legislation that preserves the current scope of the Clean Water Act, assuring that the States may continue their comprehensive administration of their authorized water quality programs;
>
> **Opposes any legislation which would limit or hinder the States' authority and application of ¶ 401 of the Clean Water Act** . . . . [100/]

It would be especially incongruous for EPA to pull the rug from under the states on this score, given that during the prior Bush administration, it went to great lengths to *stimulate* the use of § 401 by the states to protect wetlands. In its publication *Wetlands and 401 Certification, Opportunities and Guidelines for States and Eligible Indian Tribes* (April 1989), EPA stressed the importance of the 401 process to states and eligible tribes, urging them to take advantage of federal water quality certification to protect their wetlands. It recommends a host of actions and provides a wealth of information to aid them in doing so, including advice on jurisdiction, the

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[100/] National Association of Attorneys General, *Resolution Supporting the States' Authority under Section 401 of the Clean Water Act* 2 (Spring Meeting, March 11-13, 1998, Washington, D.C.).

scope of review, appropriate conditions, and developing 401 regulations. The agency couldn't have been more emphatic about the critical role of 401:

> *Clearly, the integrity of waters of the U.S. cannot be protected by an exclusive focus on wastewater effluents in open waters.* While the federal § 404 program addresses many discharges into wetlands, and other federal agencies have environmental review programs which (sic) benefit wetlands, these do not substitute for a State's responsibilities under § 401. A State's authority under § 401 includes consideration of a broad range of chemical, physical, and biological impacts. The State's responsibility includes acting upon the recognition that wetlands are critical components of healthy, functioning aquatic systems.
>
> . . . .
>
> In States without a wetlands regulatory program, the water quality certification process may be the only way in which a State can exert any direct control over projects in or affecting wetlands. It is thus critical for these States to develop a program that fully includes wetlands in their water quality certification process.
>
> But even in States which (sic) have their own wetlands regulatory programs, the water quality certification process can be an extremely valuable tool to protect wetlands. First, most State wetland regulatory laws are more limited in the wetlands that are subject to regulation than is the Clean Water Act. The Clean Water Act covers all interstate wetlands; wetlands adjacent to other regulated waters; and all other wetlands, the use, degradation or destruction of which *could* affect interstate or foreign commerce. ***This definition is extremely broad and one would be hard pressed to find a wetland for which it could be shown that its use or destruction clearly would not affect interstate commerce.*** Federal jurisdiction extends beyond that of States which (sic) regulate only coastal and/or shoreline wetlands, for instance. And in States that regulate inland wetlands, often size limitations prevent States from regulating wetlands that are subject to federal jurisdiction.[101]

We cannot say it better than the states or EPA. "Clearly, the integrity of waters of the U.S. cannot be protected by an exclusive focus on wastewater effluents in open waters," and the states cannot protect their water quality standards if federally permitted or licensed activities affecting so called "isolated" wetlands or intermittent or ephemeral streams can go forward without review and conditioning authority by the states.

3. Implications for Clean Water Act § 402 Permitting Programs

Changing the definition of "waters of the United States" would have devastating impacts on the NPDES program, the principal CWA regulatory program to control discharges of pollutants into waterways. The NPDES program is viewed as the most successful of CWA programs, estimated by EPA in 1989 as responsible for reducing discharges by point sources of toxic organic pollutants by 99% and of toxic metals by 98%.[102] More recent EPA data contained in its draft Effluent Guidelines Strategy estimate that Clean Water Act technology standards implemented through the NPDES permitting program:

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[101] Environmental Protection Agency, *Wetlands and 401 Certification: Opportunities and Guidelines for States and Eligible Indian Tribes* (Office of Water (A-104F)(April 1989), at 6, 9 (footnotes omitted; emphasis in bold added, other emphasis in original).

> Prevent discharge of almost 700 billion pounds of pollutants each year. Of this total over 1 billion pounds are toxic pollutants such as heavy metals, over 470 billion pounds are nonconventional pollutants such as nutrients and salts, and almost 220 billion pounds are conventional pollutants such as suspended solids. These pollutants include chemicals known to cause or contribute to cancer, impact reproductive health, hinder mental and motor development in children, impact the central nervous system, and damage major organs such as the liver and kidney.[103]

There are several ways in which the NPDES program is linked to the definition of waters of the United States, including in the definition of "discharge of a pollutant," 33 U.S.C. § 1362(12), which then links with the prohibition on unpermitted discharges in § 301(a) and with the permitting authority in § 402(a). 33 U.S.C. §§ 1311(a), 1342(a).

There is currently no systematic way to link current NPDES permit holders (or even major dischargers) to the types of waters that are at risk of losing protection in a federal rulemaking. That information could be made available by the federal government through linking USGS's National Hydrography Database with the Permit Compliance System (PCS) or, even better, the Enforcement and Compliance History Online (ECHO) database that is available on-line and searchable by the public, but the federal government has not yet done so. EPA should analyze and make public all information available through federal databases that would identify NPDES dischargers into waterbodies that may lose protection as a result of a rulemaking. Since a number of industries argue that the definition of waters of the United States should be limited to navigable-in-fact waters and immediately abutting wetlands,[104] information on NPDES dischargers into all other types of waters should be collected and made public in a searchable database.

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[102] EPA, *Report to Congress: Water Quality Improvement Study*, Office of Water Regulation and Standards (1989), pp. 7-8.

[103] U.S. EPA, *Draft Strategy for National Clean Water Industrial Regulations*, www.epa.gov/guide.strategy.

[104] See., e.g, V.S. Albrecht and S.M. Nickelsburg, "Could *SWANCC* be Right? A New Look at the Legislative History of the Clean Water Act," 32 ELR 11042 (Sept. 2002); Comments of Pacific Legal Foundation, "Regarding the United States Environmental Protection Agency and United States Army Corps of Engineers' Advance Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States," April 17, 2003 [sic].

While we therefore cannot begin to estimate the full environmental and human health impacts of abandoning these waters to unlimited pollutant discharges, we certainly know that doing so will pollute those waters and everything to which they are hydrologically connected with toxic pollution, oil and grease, oxygen depleting substances, and other substances that will adversely impact human health and the environment.

Based on the limited information we have so far, however, there are thousands of NPDES permit holders authorized to discharge into waters that are potentially affected by this rulemaking, including intermittent and ephemeral streams, nontidal non-adjacent wetlands, creeks that are not navigable in fact, natural ponds, manmade conveyances, etc. For example, the state of Missouri estimates that 82.5% of its NPDES permittees discharge into unclassified streams that are intermittent or ephemeral.[105/] Missouri also notes that "many headwater and intermittent streams have regulated sewage discharge permits associated with them."[106/] California notes that "many [municipal, industrial, stormwater, and confined animal] discharges are to ephemeral and intermittent ("effluent -dominated") streams," and that "any effluent discharged into an ephemeral or intermittent stream will eventually drain to navigable waters."[107/] In addition, an employee of the California Regional Water Quality Board (based on this individual's expertise, but not speaking for the agency as a whole) identifies the California Mojave River Fish Hatchery, Victor Valley Wastewater Reclamation Authority, and several phase II stormwater communities (County of San Bernadino, City of Victorville, County of Los Angeles, and City of Lancaster) as current NPDES dischargers that will be potentially outside the scope of Clean Water Act protection under this rulemaking.

We provide detailed information on one type of NPDES discharge that will almost certainly be affected by a rule change -- concentrated animal feeding operations.

Environmental and Public Health Impacts of Discharges from CAFOs

Today, large-scale industrial animal factories, which raise millions of animals and produce over 500 million tons of waste annually, dominate animal production in the United States.[108/] The proliferation of concentrated animal feeding operations (CAFOs) has resulted in significant environmental degradation and threats to public health.

[105/] Comments of Missouri Department of Natural Resources on OW-2002-0050 (March 5, 2003), p.1.

[106/] Comments of Missouri Department of Conservation on OW-2002-0050 (March 12, 2003), p. 3.

[107/] Comments of California State Water Resources Control Board on OW-2002-0050 (March 14, 2003), p. 9.

[108/] *See* preamble, *National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs)*; Final Rule, 68 Fed. Reg. 7176, 7179 (February 12, 2003).

Nutrient pollution threatens the future of this country's waterways. Excessive nutrients are responsible for almost twenty percent (20%) of reported water quality problems in impaired rivers and streams and fifty percent (50%) of impaired lake acres.[109] Nutrients in animal manure cause eutrophication and toxic algal blooms that harm recreational waters, kill fish, and alter the species composition of our coastal fisheries.[110] CAFOs contribute to water pollution when waste lagoons break, spill, or fail, releasing wastewater into rivers, lakes, and streams.[111] In fact, over 1,000 spills occurred at feedlots in just ten states between 1995 and 1998, resulting in the death of more than 13 million fish.[112] In addition, outbreaks of the toxic microbe, *Pfiesteria piscicida*, have been linked to nutrient pollution from animal waste in North Carolina and Maryland.[113] *Pfiesteria* has killed over a billion fish in coastal waters in North Carolina alone.[114] Discharges of animal waste from CAFOs also contribute to the "dead zone" in the Gulf of Mexico, more than 8,000 square miles of water devoid of sufficient oxygen to support aquatic life.[115]

Many CAFOs were established without an adequate land base to make environmentally sound use of manure as nutrient inputs for agricultural operations. As a result, CAFOs often chronically over-apply nutrients, salts, and other waste components, leading to significant surface and ground water degradation and soil deterioration.[116] The Natural Resources

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[109] *See* U.S. Environmental Protection Agency, *National Water Quality Inventory: 2000 Report to Congress* (2002).

[110] *See generally*, Robbin Marks, *Cesspools of Shame. How Factory Farm Lagoons and Sprayfields Threaten Environmental and Public Health*, NRDC and the Clean Water Network (July 2001).

[111] *See generally*, Merritt Frey et al, *Spilling Swill*, Clean Water Network (1999).

[112] *See* Merritt Frey, *Spills and Kills, Manure Pollution and America's Livestock Feedlots*, Clean Water Network. August 2000.

[113] *See* Minority Staff of the U.S. Senate Committee on Agriculture, Nutrition and Forestry, *Animal Waste Pollution in America: An Emerging National Problem*, Washington, D.C. (December 1997), at 10.

[114] *See* Southern Environmental Law Center, "*Industrial Hog Production: North Carolina*," http://www.southernenvironment.org/act_hogs_background.html.

[115] *See* Mark Schleifstein, "*Gulf's dead zone has gone Godzilla, expert says; Oxygen-deprived area reaches record size*," *The Times-Picayune* (New Orleans), July 27, 2001.

[116] *See* Laura Jackson & E. Gilbert, *Swine Manure Management Plans in North-Central Iowa: Nutrient Loading and Policy Implications*, *Journal of Soil & Water Conservation*, vol. 55, no. 2 (2000)(study of a six square mile area of Hamilton County, Iowa, found that the land area required for agronomic application of phosphorous was 9.4 times the amount of land that was being used and 6.2 times the available land); *see also* J. Schimmel, R. Levins, & D. Keeney, *Phosphorous Balance in Minnesota Feedlot Permitting*, Generic Environmental Impact

Conservation Service has identified numerous areas around the country where the nutrient load from animal production is significantly out of balance with the available land base.[117] Furthermore, ammonia emissions from open-air lagoons and sprayfields redeposit nitrogen on land and waterbodies, adding to nutrient pollution.[118]

Withdrawing Jurisdiction over Some Set of Waters Could Legalize Discharges of Animal Wastes from CAFOs.

The Clean Water Act prohibits the discharge of any pollutant except under the terms of a permit.[119] "Discharge of pollutants" is defined as any addition of pollutants from a point source into navigable waters.[120] The Clean Water Act defines a point source as "any discernable, confined and discrete conveyance, including but not limited to any ... *concentrated animal feeding operation*, or vessel or other floating craft, from which pollutants are or may be discharged."[121] Thus, when a discharge comes from a CAFO, it is a point source discharge.

Large-scale hog, dairy, chicken, and beef operations across the country discharge into traditionally navigable rivers, lakes, and streams, but they also discharge into non-navigable, intrastate waters, including wetlands, natural ponds, ephemeral and intermittent streams, and larger non-navigable tributaries. While the ANPRM contemplates redefining many of these waterways as "isolated" waters, and thereby considers pushing these waterways outside the protective ambit of the Clean Water Act, by no means are such waterways "isolated." In fact, they serve as integral parts of watersheds, performing essential functions affecting the health of water systems. Furthermore, in many areas of the country, CAFOs do not discharge directly to

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Statement on Animal Agriculture in Minnesota: Final Technical Working Paper on Economic Structures, Profitability and External Costs. State of Minnesota Environmental Quality Board (June 29, 2001) (analysis of 3,607 Minnesota feedlot permits indicated that the larger the operations, the greater the excess phosphorous per acre, Minnesota feedlots are currently over-applying 1.4 million pounds of surplus phosphorous every year.). California's 1998 Clean Water Act § 305(b) report listed 41 California ground water basins impaired by salinity, chlorides, and/or total dissolved solids from animal operations. State Water Resources Control Board, 1998 California State Water Resources Control Board (May 1999).

[117] *See* Neal Gollehon *et al.*, *Confined Animal Production and Manure Nutrients*, USDA Agriculture Information Bulletin No. 771 (June 2001); Robert Kellog, *et al.*, Manure Nutrients Relative to the Capacity of the Cropland and Pastureland to Assimilate Nutrients, USDA Pub. No. NPS 00-0579 (December 2000).

[118] *See* Eldridge R. Collins, Jr., *Ammonia Emissions From a Large Swine Production Complex*, The American Society of Agricultural Engineers, Chicago, Illinois (December 18-20, 1990).

[119] *See* 33 U.S.C. § 1311(a).

[120] 33 U.S.C. § 1362(12)(A).

[121] 33 U.S.C. § 1362(14) (emphasis added)

surface water, but rather discharge to groundwater that is hydrologically connected to surface water.[122] Other CAFOs discharge to man-made conveyances such as culverts, dams, canals, and agricultural ditches, which drain into larger rivers, lakes and streams and thus can contribute substantial pollution loads to our nation's waterways.

Federal courts have recognized that discharges from CAFOs to man-made conveyances violate the CWA.[123] Courts have also recognized that CWA jurisdiction extends to discharges from CAFOs into groundwater that is hydrologically connected to surface water.[124] Clearly, redefining the scope of navigable "waters of the United States" under the CWA could undermine federal regulation oversight of these facilities and the ability to both prevent discharges to ditches, canals, and groundwater that are connected to surface waters, as well as force compliance with no discharge requirements through federal and citizen enforcement action.

Under current EPA regulations and federal case law defining waters of the U.S., very few CAFOs are able to demonstrate that they do not discharge from the production area or land application area to waters of the U.S. or to groundwater that is hydrologically connected to waters of the U.S. Thus, most CAFOs are required to obtain NPDES permits to control and prevent water pollution. However, in the event EPA weakens its definition of waters of the U.S. as contemplated in the ANPRM and explicitly redefines man-made conveyances, such as agricultural ditches and canals, as "isolated" waters, a greater number of CAFOs could escape NPDES permitting requirements. As a result, many large-scale CAFOs that are substantially contributing to the impairment of our waterways will continue to operate without any federal oversight of their activities.

In addition to those entities that currently discharge toxins, manure, sewage, industrial effluent and other pollutants into currently protected waters that may lose Clean Water Act protection, it is important to keep in mind as well that other currently permitted dischargers would try to take advantage of the huge loophole that would be created by excluding manmade conveyances, such as canals, to exempt themselves from Clean Water Act coverage. Facilities could change the configuration of their discharges so that the "receiving water" was a canal, non-adjacent wetland, or perhaps even a pipe so that they could argue that they no longer discharged into waters of the U.S. and were no longer required to have a permit or to meet Clean Water Act treatment or water quality standards. Currently, prosecutors bring criminal actions against entities that use such mechanisms to evade Clean Water Act regulation, but if this rulemaking proceeds, enforcement entities might become powerless to prevent even such blatant circumvention of minimum Clean Water Act standards.

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[122] See, *e.g.* B. Katz and H. Hornsby, *A Preliminary Assessment of Sources of Nitrate in Springwater in Suwanee River Basin, Florida,* U.S.G.S. Report 98-69 (1998)

[123] *See e.g., Community Association For Restoration of the Environment v. Henry Bosma Dairy,* 305 F.3d 943 (9th Cir. 2002); *Idaho Rural Council v. Bosma,* 143 F. Supp. 2d 1169, 1179 (D. Idaho 2001).

[124] *See Idaho Rural Council v. Bosma,* 143 F. Supp. 2d 1169 (D. Id. 2001).

As recognized by several of the states that have already filed comments, changes to the scope of the Clean Water Act would be detrimental not only to drinking water quality, surface water quality, water quantity, wildlife habitat, flooding control regimes, etc., but it would even be detrimental to the interests of all those NPDES permitted entities who continue to discharge into navigable-in-fact waters. Those dischargers can expect to have increasingly stringent water-quality based effluent limitations with which to comply since the receiving water would be getting dirtier, the headwaters and wetlands would no longer be filtering the pollution, and the universe of responsible parties would shrink. They would be left holding the bag.

4. Implications for Clean Water Act Antidegradation Program

The goal of the CWA "is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251. The integrity of rivers and streams (including navigable rivers) depends on the complex interrelationship between headwaters and the larger streams they serve.

Specific existing functions of headwaters streams with a direct and immediate effect on downstream waters include but are not limited to: hydrologic retention capacity and contribution to the base flows of larger streams; reduction of frequency and intensity of flooding; retention of sediment and improvement of aquatic habitat; temperature maintenance of downstream waters; establishing base-level chemical composition of the overall watershed; nutrient and energy retention and measured export downstream; buffering of nonpoint source pollution; supplying food resources to riparian and downstream ecosystems; providing a thermal refuge at critical life history stages or during critical times of the year for aquatic life; providing vital spawning habitats and habitat for juvenile fishes; and providing critical habitat for a range of unique and threatened species.

Thus, healthy and intact headwaters play a critical role in the success and vigor of the larger watershed and ecosystem. The protection of ephemeral, intermittent, and other headwater tributaries is crucial to the protection of the chemical, physical, and biological integrity of downstream waters. Clean Water Act jurisdiction has been the foundation of that protection. In particular, States must establish water quality standards in order to "protect the public welfare," "enhance the quality of water," and "taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes....taking into consideration their use and value for navigation." 33 U.S.C. § 1313(b)(2)(A). One of these standards, antidegradation policy and implementation procedures, requires states to assess activities that may lower the quality of the states' waters. 33 U.S.C. § 1313(d)(4)(B); 40 C.F.R. §§ 131.6(d), 131.12(a). This assessment relies on an accurate and predictable knowledge of baseline water quality and upstream sources of pollution. A jurisdictional change would undermine any attempt to accurately assess baseline water quality. Upstream activities would unpredictably discharge any amount of pollutant, toxin, dirt, rock, or contaminated fill – the sources unidentified and unmonitored – creating huge unanticipated declines in water quality. These discharges would not only devastate headwater streams but also undermine attempts to write permits protective of water quality downstream.

The federal antidegradation policy establishes three levels of water quality protection: Tier 1, Tier 2, and Tier 3. Tier 1 protection establishes the minimum protection for all waters and requires that "[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected." 40 C.F.R. § 131.12(a)(1). Obviously, eliminating key antidegradation existing use protections for ephemeral, intermittent, and other headwater tributaries would destroy the public uses of these streams for recreation, support of aquatic and other wildlife life, and, in some rural communities, drinking water.

However, as described above, the existing uses of ephemeral, intermittent, and other headwater tributaries do not exist in a vacuum but are an essential part of the health and maintenance of the larger watershed and navigable rivers. EPA recognizes this connection and in jurisdictional waters requires "[in] designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters." 40 C.F.R. § 131.10 (b). Thus, eliminating existing and designated uses protections for the headwaters jeopardizes the antidegradation and use protections guaranteed for all waters through 40 C.F.R. § 131.12(a)(1).

Tier 2 antidegradation protection provides that, where the water quality of a water body exceeds that necessary to support aquatic life and recreation, that level of water quality shall be maintained unless the state determines that "allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located." 40 C.F.R. § 131.12(a)(2). In addition, "the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control." Id.

Eliminating Tier 2 protections from high quality headwater streams would eliminate the need to conduct a rigorous and open public review process to assure that the economic and social benefits of the proposed activity outweigh the costs of degrading the water. It would also eliminate the need to consider less degrading alternatives to the discharge. Ultimately, discharges could take place even in the face of obvious and devastating public harm (including harm to navigable waters involved in interstate or foreign commerce) or if reasonable no discharge or less degrading alternatives existed.

Eliminating Tier 2 protections in headwaters streams would significantly impact Tier 2 reviews downstream by reducing a stream's assimilative capacity to a greater degree than would have occurred with upstream antidegradation protection in place. The reduction in assimilative capacity would reduce or *eliminate* the number of socially beneficial projects allowed to proceed without a violation of water quality standards and without prematurely triggering prohibitions on discharges that "cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard." 40 C.F.R. § 122.44 (d). In essence discharges outside the jurisdiction of the Clean Water Act would be able to use a valuable public resource – public waterways - at their discretion for private gain at public expense.

Tier 3 protection provides that, "[w]here high quality waters constitute[s] an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected." 40 C.F.R. § 131.12(a)(3). Failure to absolutely protect headwater tributaries would lead to serious and significant degradation of Outstanding Natural Resource Waters for the many reasons outlined for Tier 1 and 2 protections. As some of the most valuable water resources in the country, their future and very existence could not be assured.

5. Implications for federal assistance to state water pollution control programs

In addition to actually running NDPES programs or portions of state NPDES programs in a number of states and running the § 404 program in most states (every state except NJ and Michigan), the federal government provides financial and technical assistance to all states in designing and implementing their programs to protect waters of the United States from pollution under the Clean Water Act.

Water pollution control program grants: Water pollution control program grants (§ 106 grants) provide financial assistance to states for permitting, pollution control activities, surveillance, monitoring, training and public information, and enforcement. Many of those activities will no longer be authorized under the CWA for waters that are no longer considered to be waters of the US. It seems likely, therefore that the available funding for these purposes will be reduced substantially as well. The President has requested $200,400,000 for § 106 grants for FY 04. Funding in the FY 03 appropriation for § 106 grants is $192,500,000.

Clean Water State Revolving Fund and Nonpoint program funding: Clean Water State Revolving Fund money can be spent on three types of projects (33 U.S.C. § 1383(c)) – construction of publicly-owned treatment works, implementation of a nonpoint management program under § 319, and development and implementation of an estuary plan under § 329. The President has requested $850,000,000 in state revolving fund money in FY 04. The congressionally approved budget for this fund in FY 03 was $1,350,000.

While there does not appear to be a statutory link between the definition of "navigable waters" and the construction of publicly-owned treatment works, federal permits for such facilities would no longer be required under federal law if they discharge into waters that are no longer waters of the U.S. While not necessarily required by law, it seems likely that the funding for construction of such facilities (including decentralized wastewater and distributed stormwater approaches that are probably most likely to discharge into excluded waters) would be reduced substantially since those activities would no longer be Clean Water Act programs.

State nonpoint management programs are "for controlling pollution added from nonpoint sources to the navigable waters within the State and improving the quality of such waters." 33 U.S.C. § 1329(b)(1). Thus, funds would not appear to be available to control nonpoint pollution into waters that are no longer navigable waters under the CWA. In addition to the SRF money identified above, the President has requested $238,000,000 in § 319 funding for FY 2004 and Congress appropriated $240,000,000 in § 319 funding for FY 2003.

State revolving funds have been used to pay for a variety of nonpoint source related activities, including drinking water source protection, wetlands restoration, decentralized wastewater treatment, and agricultural best management practices. Funding for all of those activities may be threatened where they relate to protecting waters that are no longer covered by the state's management plan since they are no longer considered to be waters of the U.S.

In addition, EPA can provide technical assistance to states, upon their request, to develop a management program "for those portions of the navigable waters requested by such State." 33 U.S.C. § 1329(f). EPA technical assistance is, therefore, limited to programs for navigable waters.

B. OTHER FEDERAL ENVIRONMENTAL PROGRAMS

1. Implications for Endangered Species Act Programs

Narrowing the scope of the CWA frustrates the policies and purposes not only of the CWA, but also of the Endangered Species Act (ESA). Elimination of the endangered species rationale from the MBR effectively denies ESA protection to endangered species and their habitat, because many habitat-disturbing actions receive ESA review only because a CWA permit is required – thus triggering the ESA's consultation requirement. The Supreme Court in *SWANCC* has not called into question the other factors of the MBR; only this Administration has. EPA and the Corps must, and can, retain the factor relating to use of waters by threatened and endangered species as habitat.

So-called "isolated" waters support numerous threatened and endangered plant and animal species. Examples of such species, and the wetlands upon which they depend, include vernal pool complexes with endangered tadpole shrimp and delta green ground beetle; desert springs that provide habitat for endangered big horn sheep, Owens pupfish, Devils Hole pupfish, and Warm Springs pupfish; Nebraska sandhills that are habitat for whooping crane and bald eagle; sinkholes that harbor the northeastern bulrush, swamp pink and Virginia sneezeweed; and dune swales, frequented by the St. Andrew beach mouse. See "The U.S. Supreme Court Limits Federal Regulation of Wetlands: Implications of the *SWANCC* Decision," California Research Board (February 2002), available at < http://www.library.ca.gov/crb/02/03/02-003.pdf >; Tiner, R.W., H. C. Bergquist, G. P. DeAlessio, and M. J. Starr. 2002. Geographically Isolated Wetlands: A Preliminary Assessment of their Characteristics and Status in Selected Areas of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Northeast Region, Hadley, MA, available at < http://wetlands.fws.gov/Pubs_Reports/isolated/report.htm >.

If the Administration were to persist with its interpretation as in the Guidance Memorandum, that the *SWANCC* Court struck down all factors of the Migratory Bird Rule, including even "isolated" waters known to be habitat for a threatened or endangered species, the EPA and Corps would lose jurisdiction over those waters, further imperiling threatened and endangered species. The Fish and Wildlife Service (FWS) reviews activities impacting threatened and endangered species that are federally executed, funded, or authorized. See 16 U.S.C. § 1536(a)(2). If there is no federal permit -- e.g., no Corps jurisdiction -- the Endangered Species Act (ESA) has no provision that triggers FWS review of a project that may jeopardize listed species.

Using the *SWANCC* decision to justify removal of jurisdiction based on habitat use by endangered species will not only cripple future application of the CWA, but will also undermine the ESA. Such a reading will result in the reduced FWS involvement in projects involving "isolated" wetlands outside of Corps and EPA jurisdiction. Thus, a project adversely affecting so-called "isolated waters" which harbor listed species may escape review under the ESA, 16 U.S.C. §§ 1531 et seq. The loss of ESA protections to a significant amount of endangered species habitat will further harm numerous species, making our duty to recover these species even more challenging.

2. Implications for Federal Safe Drinking Water Act Program

In enacting the FWPCA, Pub. L. 92-500, 86 Stat. 816 *et seq.*, and the 1977 Clean Water Act, Pub. L. 95-217, 91 Stat. 1567 *et seq.*, Congress was acutely aware that there are substantial public health implications to the pollution of the nation's waters. Congress clearly stated that its objective was to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. 33 U.S.C. § 1251(a). As the Act's legislative history repeatedly demonstrates, one of the key reasons for congressional concern about the need to restore and maintain the integrity of the nation's waterways was to protect public health, both from drinking, and from coming into contact with contaminated water.

In enacting the FWPCA in 1972, Congress reacted to water quality crises such as the Cuyahoga River catching fire. The Senate Committee drafting the legislation noted that the Committee became increasingly concerned during 1970 with the effects of pollution on public health. S. Rep. 92-414, *reprinted at* 1972 U.S.C.C.A.N. 3668, 3670 (October 28, 1971). The Committee noted that the Act is intended to implement the interim goal, by 1981, wherever attainable, a standard of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in an on the water, and *also assures that public water supplies will be protected. Id.*, at 3712.

Any effort to use the *SWANCC* decision as an excuse for failing to control pollution discharges and filling of non-traditionally navigable waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, would have profound public health implications. As elementary school earth sciences classes learn, these waters generally are all interconnected through the hydrologic cycle. One third of all surface waters derive from groundwater, the recharge of which industry argues should not be protected because they are often "isolated" wetlands. Moreover, many intermittent streams recharge groundwater, and of course often provide base flow for larger rivers, and also recharge lakes. In addition, it is an elementary hydrogeological principle that all rivers have headwaters, much or all of which would be excluded from coverage under the approach industry urges upon EPA (i.e. allowing protection only of waters that are traditionally navigable by a boat).

Unregulated contamination of non-traditionally navigable waters by sewage, industrial point source pollution, discharges of oil or hazardous materials, or other pollution could spell disaster for the nation's drinking water supplies. We learned this lesson when pollution of the Milwaukee River contaminated the city of Milwaukee's drinking water supply (which reportedly was in compliance with all EPA drinking water regulations at the time) with the waterborne chlorine-resistant parasite *Cryptosporidium*, sickening over 400,000 people and killing 50 to 100.[125/] More recently, in 1999, more than 1,000 people at a county fair in upstate New York were stricken by an extremely virulent strain of *E. coli* (the same bacteria that we have come to associate with bad meat) after drinking water contaminated by polluted runoff from a stream at a nearby cattle farm that contaminated a well using shallow groundwater. On that occasion, over 1,000 people became ill, and a three-year-old girl and an elderly man died of acute kidney failure when their bodies could not fight off the pathogen.[126/]

Each year, the Centers for Disease Control and Prevention (CDC) counts a dozen or more significant waterborne disease outbreaks attributable to contaminated drinking water, and this is widely viewed as a serious undercount.[127/] Recent estimates published by EPA and independent researchers estimate that *each year,* about 7.1 million Americans become mildly to moderately ill from tap water, including 520,000 to 690,000 moderate to severe cases, triggering about 1,200 deaths.[128/]

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[125] W. R. MacKenzie, *et. al.*, A Massive Outbreak in Milwaukee of *Cryptosporidium* Infection Transmitted Through the Public Water Supply, *New England Journal of Medicine*, 1994, 331: 161B167. The precise number of people killed by the Milwaukee outbreak is not known with certainty. A count by the *Milwaukee Journal* put the number at over 100, while the official state and local health department count was a minimum of 50 deaths. See Marilyn Marchione. Deaths continued after crypto outbreak: State report attributes a minimum of 50 deaths from '93 to '95. *The Milwaukee Journal Sentinel*, May 27, 1996.

[126] 1061 suspected *E. coli* Cases in New York Outbreak, *Infectious Disease News* (October 1999), *available online at* www.infectiousdiseasenews.com/199910/frameset.asp?article=ecoli.asp; Centers for Disease Control and Prevention, Public health dispatch: Outbreak of *Escherichia coli* O157:H7 and *Campylobacter* among attendees of the Washington County Fair, New York, Morbidity and Mortality Weekly Report (*MMWR)*, 1999, 48(36): 803.

[127] *See*, CDC-EPA Biennial Reports on Waterborne Disease Outbreaks in *MMWR.*

[128] R. Levin and W. Harrington, Infectious Waterborne Disease and Disinfection Byproducts in the US: Costs of Disease, *printed in* E.G. Reichard and G.A. Zapponi, Assessing and Managing Health Risks from Drinking Water Contamination: Approaches and Applications at 305 (IAS, Rome, Publication No. 233, 1994).

There are over 11,400 community public water systems (PASS), serving over 178,000,000 Americans, that use surface water as their primary source for their tap water.[129] Most of these water systems use World War I-era technologies for water treatment, including coagulation, sedimentation, and (generally sand) filters to remove some of the larger particles in the water.[130] Some surface water systems, such as Boston, New York, and parts of the Seattle and San Francisco systems, and some smaller systems, use no filtration at all, hoping that protection of their watersheds will be sufficient to protect their citizens. Many other water suppliers use filtration that is of questionable efficacy against even the most basic pathogens. Only about 10% of even the larger, more sophisticated surface water systems have any form of advanced treatment designed to remove inorganic chemicals such as arsenic or synthetic organic chemicals such as pesticides and industrial chemicals.[131] Thus, primary reliance upon treatment of drinking water supplies for protection of public health is extremely risky, and likely to be disastrous.

In addition, most of the over 42,000 groundwater-supplied drinking water systems, which in total serve about 86,000,000 Americans with their tap water, have little or no treatment, with the exception in many cases of chlorine treatment. There is essentially no safety net for most of these systems; as waterborne disease and water contamination statistics show, these generally untreated or minimally treated waters, once contaminated, pose a serious threat to public health.

Thus, any rollback in EPA's jurisdiction over waters of the United States is likely to wreak havoc with watershed and aquifer protection efforts. Contamination of headwaters and of "isolated" wetlands that recharge groundwater connected to drinking water will pose substantial threats to public health. Any EPA action with this impact would not only pose a major public health risk, but would directly contravene congressional intent to protect public health and the source waters of public water supplies.

IX. IMPLICATIONS OF THE CONTEMPLATED JURISDICTIONAL ROLLBACK FOR SELECTED ECOLOGICAL REGIONS

A. ALASKA'S NORTH SLOPE

1. Wetlands in Alaska Are a Resource of Regional and National Importance.

America's largest state is also its wettest. The U.S. Fish and Wildlife Service estimates that there are almost 175,000,000 acres of wetlands in Alaska.[132] With nearly two-thirds of the nation's wetlands, Alaska boasts many of the most diverse and critical wetland habitats on the continent. Coastal estuaries, saltwater lagoons, river corridors, marshes, muskegs, bogs, and wet tundra support an astounding variety of fish and wildlife species.

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[129] EPA, OGWDW, *Factoids: Drinking Water and Ground Water Statistics for 2000* at 1 (2001), available online at http://www.epa.gov/safewater/data/00factoids.pdf

[130] NRDC, *Victorian Water Systems Enter the 21st Century* (1995).

[131] *Id.*

[132] Hall, Jonathan V., W.E. Frayer, and Bill O.Wilen, Status of Alaska Wetlands 3 (1994).

Wetlands in Alaska provide nesting, rearing, and staging habitat for millions of waterfowl and shorebirds important to hunters and birdwatchers throughout the nation. Thirty-four species of waterfowl nest in Alaska's wetlands that nest nowhere else in the United States. Eighty percent of the world's trumpeter swans and 50 percent of all tundra swans nest there. Ten million ducks, 750,000 geese, and 80,000 swans migrate annually from nesting grounds in Alaska to wintering areas in the Lower 48, Canada, Mexico, and Asia. Another two million ducks and 300,000 geese depend on Alaska's wetlands as critical staging areas. Alaska's wetlands support up to 60 percent of North America's northern pintails, 25 percent of widgeon, and nearly 20 percent of scaup and canvasbacks. Seventeen percent of all geese and 11 percent of all ducks harvested in North America are reared in Alaska's wetlands.

No natural ecosystem has a greater influence on Alaska's economy than wetlands. Wetlands provide critical habitat for fish such as salmon that support a multi-billion dollar commercial fishing industry. Annual gross revenues from salmon harvests alone exceed $1.5 billion and provide more than 70,000 jobs. Sport fishing is a significant and growing industry whose health depends on Alaska's wetlands. Sport fishing generates more then 5,000 full-time jobs and $350 million in revenues. Hunting also depends on wildlife species sustained by wetlands and contributes more than $80 million in gross revenues. Tourism is Alaska's largest growth industry, generating more than $1 billion in revenues and 13,500 jobs. Wildlife is one of the state's key visitor attractions. Many wildlife species are dependent upon wetlands habitats for at least part of their life cycle, including brown bears, caribou, moose, muskoxen, wolves, wolverines, foxes, river otters, beavers, mink and muskrats.

Subsistence use of wetlands resources in Alaska is extensive. Nearly all of Alaska's rural Native villages are located in or near wetlands because their subsistence-based economies depend on fish and wildlife that are sustained by wetlands.[133] Fish and wildlife resources harvested for subsistence use that are dependent on wetlands include five species of Pacific salmon, shellfish, ducks, geese, beaver, and otter. Plant materials frequently collected from wetlands include blueberries, cranberries, Labrador tea, and willow.

While the hydrologic and water quality functions of Alaska wetlands are often poorly understood, studies have shown that these wetlands offer many of the same values as Lower 48 wetlands. For instance, black spruce wetlands are prominent features of taiga landscapes and have been widely portrayed as having relatively little value. However, studies have shown that black spruce wetlands perform several substantial water quality functions. According to the U.S. Environmental Protection Agency, the peat and peat-forming vegetation of these wetlands compete for nutrients and form a sediment-trapping microtopography in bogs. Some vegetation responds to nutrient input with increased uptake. Peat accumulation sequesters nutrients and contaminants.[134]

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[133] Ellanna, L.J., and P.C. Wheeler, Subsistence Use of Wetlands in Alaska (1986) (in The Environmental Institute, Alaska Regional Wetland Functions – Proceedings of a Workshop 85-103).

2. North Slope wetlands are not "isolated."

Approximately 1,542,000 acres of wetlands (83 percent of the land surface) are found on Alaska's North Slope.[135] An additional five percent of the area is lacustrine (lake) habitat. The wetlands areas range from temporary flooded willow areas along streams to saturated moist tundra dominated by cottongrass, sedge, and low shrubs.

The mosaic of vegetated wetlands, ponds, and lakes of the coastal plain forms a nearly continuous cover stretching from tidal areas to the foothills of the Brooks Range. Non-wetlands habitats are limited to well-drained terraces along rivers, some small dune areas near the coast, bluffs, and pingos. Precipitation is the dominant source of water for the wetlands ecosystems in the region. Although annual precipitation amounts are very low, wetlands hydrology is maintained by the presence of a permafrost table near the soil surface and low rates of evapotranspiration.

The land surface of the arctic coastal plain slopes gently toward the Beaufort Sea. During the spring snow melt period, large volumes of water move across the land surface as sheet flow toward the sea. In areas of slightly rolling terrain, the water flows directly into streams that lead to rivers. All of these rivers flow northward and eventually empty into the Beaufort Sea. There are few closed basins that are isolated from this regional movement of water from south to north.[136] Thus, wetlands and other waters on Alaska's North Slope are adjacent or hydrologically connected to the Beaufort Sea, a water that is navigable in fact.

EPA and the Corps have long recognized that the broad goals of the Clean Water Act require a systemic approach to maintaining and improving water quality. Indeed, a key factor in the Supreme Court's decision in Riverside Bayview Homes was the Corps' determination that wetlands near lakes, rivers, streams, and other bodies of water may be integral parts of a larger ecosystem: "The regulation of activities that cause water pollution cannot rely on . . . artificial lines . . . but must focus on all waters that together form the entire aquatic ecosystem. Water moves in hydrological cycles, and the pollution of this part of the aquatic system, regardless of whether it is above or below an ordinary high water mark, or mean high tide line, will affect the water quality of the other waters within that aquatic system." Riverside Bayview Homes, 474 U.S. at 134 (*Quoting* 42 Fed. Reg. 37128 (1977)).

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[134] Post, Roger A., for U.S. Environmental Protection Agency, Functional Profile of Black Spruce Wetlands in Alaska 130 (1996).

[135] Hall (1994).

[136] Hall, Jonathan V., (personal communication) (April 2, 2003).

Wetlands on the North Slope are part of a larger aquatic ecosystem that includes the Beaufort Sea and the rivers and streams that drain into the sea. These waters are hydrologically connected and functionally interdependent. For example, the Beaufort Sea, a water that is inarguably subject to federal jurisdiction, depends on the wetlands of the coastal plain for flood and erosion buffering, nutrient discharge, and pollution control. Moreover, the value of the Beaufort Sea for wildlife is greatly enhanced by the fact that coastal plain wetlands are part of the larger ecosystem. The bottom line is that wetlands on the North Slope are not isolated. They are part of a vast complex of wetlands that are adjacent to the Beaufort Sea, inseparably bound to that water through myriad hydrologic and ecologic connections. In fact, by most standards, the wetlands of the North Slope are more closely tied to the Beaufort Sea than the wetlands in Riverside Bayview Home were to the Black River. See Riverside Bayview Homes, 474 U.S. at 131.

3. North Slope wetlands perform numerous critical environmental functions.

Although North Slope wetlands are physically and hydrologically connected to the Beaufort Sea, and are therefore not affected by the SWANCC decision, it is important to acknowledge the critical functions and values of these waters. In particular, it should be emphasized that arctic wetlands as a whole perform the same wetlands functions as temperate wetlands in the Lower 48 states.

A. Hydrologic Functions

Although arctic wetlands are not sites of discharge or recharge of subpermafrost aquifers, suprapermafrost groundwater can influence wetland communities below arctic slopes in ways comparable to aquifer discharge in temperate regions. For instance, these wetlands provide storage for flood and storm waters and are integral to natural drainage patterns.[137]

During the summer, wetlands on the coastal plain are an effective means of flow regulation. Thaw thickens the active layer and evapotranspiration lowers the water table. Both events increase the capacity of wetlands to store precipitation. Regulation of flow is evident when wetlands trap and hold incident precipitation, lowering hydrographic peaks. The mechanisms for flow regulation and storage in these wetlands are ice-free voids and cracks, absorption by dehydrated moss and peat, low relief, subsurface flow, and thaw pond storage.[138] Although groundwater discharge may regulate streamflow in permafrost-free areas, tundra streams on the North Slope are entirely fed by surface or near-surface wetland discharge.[139]

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137 Oceanographic Institute of Washington, for U.S. Army Corps of Engineers, Alaska North Slope Wetlands Study IV–26 (1979) (attached).

138 Racine, Charles H., for U.S. Army Corps of Engineers, Current Issues in Alaska Wetland Management 7 (1994) (attached).

139 Post, Roger A., Alaska Department of Fish and Game, Effects of Petroleum Operations in Alaska Wetlands: A Critique 13 (1990) (attached).

Arctic-tundra wetlands also stabilize sediment and anchor shorelines, as well as maintain the thermal equilibrium of ice-rich soils. Some North Slope wetlands dissipate mechanical erosive forces and anchor shorelines because aquatic vegetation and shallow water absorb wave energy. For instance, coastal plain lakes may be many kilometers long and capable of generating waves that cause mechanical erosion. However, *Carex aquatilis* and *Arctophila fulva* are dominant vascular plants in these freshwater habitats, forming belted patterns around ponds and lakes which anchor the shorelines and dissipate mechanical erosive forces.[140/] Removal of the surface wetland vegetation cover in the arctic has been shown to result in thermokarst and extensive erosion.[141/]

B. Water Quality Functions

Wetlands on the North Slope purify water by trapping sediments and by transforming or retaining nutrients and toxicants. The physical structure of tundra streams, particularly the smaller drainages, consists of a series of "beads" (small thermokarst ponds) connected by narrow, deep channels. At breakup, beaded streams flood adjacent tundra creating extensive wetlands complexes. Later in the summer, when beaded streams are confined to their channels and discharges may be intermittent, water velocities are typically very low on the flat coastal plain providing ample opportunity for quiescent settling of particulates.[142/]

Sediment can also be trapped by riparian wetlands along large arctic rivers such as the Colville and Sagavanirktok. For instance, the Sagavanirktok River has a braided pattern and a broad floodplain with many vegetated and unvegetated islands. At breakup, turbid water covers the floodplain, inundating the complex of channels, islands, and riparian wetlands. Zones of low water velocity are created by the increased cross-sectional area of the inundated floodplain, frictional resistance of flooded vegetation, and low wetlands gradients, allowing settling of particulates. As river discharge diminishes, pools in high-water channels and microtopographic depressions retain water, trapping sediment.[143/]

North Slope wetlands also play an important role in nutrient uptake and contaminant removal. Tundra pond wetlands, which cover a significant area of the Arctic coastal plain, are reasonably productive and actually contain fine sediments that have high cation exchange and buffering capacity, particularly in relation to phosphate. In addition, studies show that tundra vegetation is biologically active at low temperatures and rapidly takes up phosphorus in response to

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[140] Post at 14.

[141] Racine at 7.

[142] Post at 16.

[143] Post at 17.

fertilization.[144] Vascular plants, plankton, and soil microflora of arctic-tundra wetlands either respond, or have the potential to respond, to nutrient input with increased growth. The period of high productivity coincides with the period of potential nutrient or contaminant input, enhancing the water purification function of these wetlands.[145]

C. Habitat Functions

The extraordinary habitat functions of North Slope wetlands are well established, especially with respect to birds. These wetlands support large numbers of breeding and postbreeding loons, geese, ducks, gulls, terns, and shorebirds. Interspersed upland tundra habitats are used by passerines, ptarmigan, and raptors.[146] Some 135 bird species have been recorded on the coastal plain of the Arctic National Wildlife Refuge, of which 70 are regular nesters. Birds come from all 50 states, Mexico, Central and South America, the mid- and South Pacific Islands, Asia, and even Africa and Antarctica.[147] Distribution of waterfowl on the North Slope during spring and summer clearly reflects the relative abundance of water with major concentrations occurring near Peard Bay, Dease Inlet, Harrison Bay (including Teshekpuk Lake), and the Colville Delta.[148]

In spring, birds from several groups, but particularly waterfowl, shorebirds, and songbirds, arrive on the coastal plain via coastal and inland migration routes. At the same time, large areas of the plain are inundated with water due to melting of snow and ice and the poor drainage characteristics due to the continuous layer of permafrost. North Slope wetlands are important for early production of invertebrate populations and provide waterfowl and shorebirds with an early source of food and open water habitat while the majority of lake and pond basins are still frozen. Wetlands remain important areas for waterfowl and shorebird utilization throughout the summer although some species disperse to adjacent lakes and ponds when they thaw for foraging and breeding purposes.[149]

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[144] Racine at 8.

[145] Post at 22.

[146] Derksen, Dirk V., Thomas C. Rothe, and William D. Eldridge, U.S. Fish and Wildlife Service, Use of Wetland Habitats by Birds in the National Petroleum Reserve-Alaska (1981).

[147] Whitten, Ken, for National Wildlife Federation, The Arctic National Wildlife Refuge Wildlife Values 16 (2002) (attached).

[148] Lensink, Calvin J. and Thomas C. Rothe, Values of Alaskan Wetlands for Waterfowl 7 (1986) (attached).

[149] Oceanographic Institute of Washington at IV-15 (1979).

While there are other extensive areas of moist tundra in Alaska, the northern coastal plain is unique in its geographic position, its climate regime, and its possible importance to birds moving in east-west migration. Moreover, recognition of the importance of the coastal plain to usually nonbreeding species of waterfowl, such as pintails, has increased with the knowledge that drought-displaced prairie ducks often migrate to northern habitats. [150/]

Wetlands on Alaska's North Slope also provide crucial habitat for a number of mammal species.[151/] Mammals found to forage or den in these wetlands include brown lemmings, collared lemmings, moose, masked shrews, arctic foxes, red foxes, least weasels, ermine, gray wolves, and grizzly bears.[152/] These wetlands also host one of the greatest wildlife spectacles in North America: the annual migration of caribou. Each year, over 100,000 caribou migrate to the Arctic coastal plain from wintering grounds to the south and east in Alaska, the Yukon, and Northwest Territories of Canada. The vast wetlands complexes of the North Slope provide ideal calving ground for the caribou as well as superior forage and a place to escape predators and insects. In addition, polar bears and muskoxen can be found in the Arctic coastal plain in any season of the year.[153/]

D. Recreation Functions

Few places on the globe possess the untrammeled expanses of arctic landscapes. These landscapes and the wetlands they contain provide unique recreation and heritage values. Consequently, there are more people visiting areas like the Arctic Refuge and they are staying longer than the average tourist at road accessible areas such as Prudhoe Bay. In 1989, there were 1,289 personal-use days in the wetlands of the arctic coastal plain. Many of these visits involved guided or unguided river raft trips or backpacking trips. The remaining wetlands use came from sport hunters and unreported private use. Recreational use of some rivers in the Arctic Refuge have reached such a magnitude as to require regulation of commercial operations.[154/]

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150 Bergman, Robert D., Robert L. Howard, Kenneth F. Abraham, and Milton W. Weller, U.S. Fish and Wildlife Service, Water Birds and their Wetlands Resources in Relation to Oil Development at Storkersen Point, Alaska, 35-36 (1977).

151 Post at 26-27.

152 Oceanographic Institute of Washington at IV-21 (1979).

153 Whitten at 9-15 (2002).

154 Post at 28-29 (1990).

4. The degradation or destruction of North Slope wetlands would have substantial effects on interstate and foreign commerce.

Unlike the abandoned sand and gravel pit at issue in *SWANCC*, the vast wetlands of Alaska's North Slope are among the most pristine, scenic, and biologically productive waters in the entire country. There is no question that failure to regulate activities in these waters could substantially affect interstate and foreign commerce and that these activities are therefore well within Clean Water Act jurisdiction. For example, loss of wetlands on the North Slope could have harmful effects on the 123,000-strong Porcupine caribou herd. Over a dozen Native villages in two nations depend on these animals for subsistence and cultural identity. The Porcupine caribou herd is so important that in 1987 the United States signed an agreement with Canada on the Conservation of the Porcupine Caribou Herd. The agreement's objectives include protecting caribou habitat and ensuring continued opportunities for subsistence hunters. The International Porcupine Caribou Board, established to advise the two nations on managing and protecting the caribou, has identified the coastal plain of the Arctic Refuge as sensitive habitat for calving and summer grazing.[155]

B. MOUNTAINTOP REMOVAL COAL MINING IN APPALACHIA

If the definition of "waters of the United States" was redefined to no longer include intermittent and ephemeral streams, central Appalachian streams would receive significantly less protection than they currently have. Indeed, the filling of many hundreds of miles of streams that is currently regulated by the U.S. Army Corps of Engineers would no longer be regulated at all by the federal agencies.

Most of the streams filled and destroyed by coal companies in central Appalachia are intermittent or ephemeral in nature, although hundreds of miles of perennial streams have also been filled by strip mines in the region. If the Corps were to stop regulating activities on intermittent and ephemeral streams, these streams would lose important protections provided by Section 404 of the Clean Water Act and NEPA. The 404(b)(1) guidelines currently provide the most important protections to streams filled by these mines. Without the protection of the 404(b)(1) guidelines, the fills will be much larger, more stream miles will be filled and the mitigation currently required will be lost. Also, because there would no longer be federal permits at issue, NEPA protections would no longer be available.

The loss of 404 and NEPA protection for these streams would be devastating. In addition to avoidance minimization and mitigation, Section 404 requires analysis of individual and cumulative impacts before permit issuance. In central Appalachia, the cumulative impacts of these mines are devastating. For example, in West Virginia, more than 40% of the upper reaches of the Mud River watershed have been filled. In just three counties in West Virginia more than 400 miles of ephemeral and intermittent stream have been filed by these mines. Protecting the

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155 Whitten at 4-5 (2002).

upper reaches of these streams is essential to protecting the ecology of the lower reaches, because the lower stream reaches and rivers that depend on such tributaries are dependent on the energy exported from upper reaches. (Wallace 2001; Stout 1999). If the cumulative impacts of the hundreds of fills in the region are not analyzed and limited, the ecology of the region's streams and rivers will be devastated.

Additionally, the Corps' jurisdiction to authorize fills in intermittent and ephemeral streams provides cover to State agencies with NPDES primacy to certify 404 permits pursuant to Section 401 of the Clean Water Act. If the Corps loses its authority to permit fills under Section 404, the fills would then actually violate state clean water laws because the discharge of pollutants currently covered by and certified pursuant the 404 permit would not be certifiable by state agencies that do not have delegated 404 authority. In other words, because "waters of the state" would still include ephemeral and intermittent stream segments, any discharge of rock and dirt (pollutants) would have to be certified. If there were no 404 permit, such discharges could not comply with water quality standards and would be impermissible under state law.

The devastation of the Appalachian region by mountaintop removal coal mining is already extensive. What is desperately needed is greater enforcement of environmental protection laws, like the federal Clean Water Act – not attempts to weaken federal statutes or their regulations to leave communities, like those harmed by mountaintop removal mining, with even fewer protections.

PART TWO
Critique of Fabricant/Morello "Guidance Document"

Introduction

Attached to the Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States" published on January 15, 2003, the EPA and the Army Corps of Engineers issued a "Guidance Document" or "Joint Memorandum." Its stated purpose is to provide "clarifying guidance" regarding the *SWANCC* decision and Clean Water Act jurisdiction issues that had arisen since *SWANCC*. The authors of the guidance are the General Counsels of EPA and the Department of the Army.

The guidance has two parts. First, it establishes what effectively amount to new rules for circumstances under which the agencies claim there is no longer jurisdiction under the Clean Water Act. This is done, however, without any public notice or rulemaking procedures. It is done without any compliance with the National Environmental Policy Act. Instead, the guidance automatically changes the jurisdictional rule based on the agencies' new interpretation of a two-year-old Supreme Court case, *SWANCC*. By characterizing the *SWANCC* opinion as far broader than it is, the authors of the guidance simply set forth new rules on jurisdiction that become effective immediately, but have no basis in fact or law and bypass all procedural requirements.

Second, the guidance opines about the status of traditional navigable waters and adjacent wetlands and tributary systems and adjacent wetlands. To support the lack of jurisdiction under the Clean Water Act, the authors repeatedly cite U.S. District Court decisions that are currently under appeal by the authors' own agencies -- EPA and the Army Corps of Engineers. They conclude, however, that jurisdictional and permitting decisions should proceed on a case-by-case basis.

New Rules for "No Jurisdiction" Determinations

The guidance announces what amounts to a new rule for the EPA and the Army Corps of Engineers. First, the new rule in the guidance improperly expands the "no jurisdiction" rule from one factor to three factors. Second, the new rule creates a process for declining to assert jurisdiction over an even broader category of waters, requiring agency personnel to get Headquarters' permission before asserting jurisdiction over these waters. Third, the new rule violates laws of administrative rulemaking and environmental procedure.

The *SWANCC* opinion is clearly articulated and very narrow, and summarized by the 5 to 4 majority as follows: "We hold that 33 C.F.R. §328.3(a)(3) (1999), as clarified and applied to petitioner's balefill site pursuant to the 'Migratory Bird Rule,' 51 Fed. Reg. 41217 (1986), exceeds the authority granted to respondents under § 404(a) of the CWA." *SWANCC*, 531 U.S. at 174. It is meant to apply only to that section of the "Migratory Bird Rule" that applied to petitioner's balefill site – use of waters as habitat for migratory birds that cross state lines in their migrations.

The authors of the guidance, however, take great liberties with the *SWANCC* opinion. They disregard the limitations of the stated holding and now claim that the Supreme Court in *SWANCC* raised questions about all the factors under the Migratory Bird Rule, 51 Fed. Reg. 41217 (i.e., use of the water as habitat for birds protected by Migratory Bird Treaties; use of the water as habitat for Federally protected endangered or threatened species; or use of the water to irrigate crops sold in interstate commerce). The guidance claims that *SWANCC* "calls into question whether CWA jurisdiction over "isolated," intrastate, non-navigable waters would now be predicated on the other factors listed in the Migratory Bird Rule." Guidance, at p. 25. That is simply false. Nowhere in the *SWANCC* opinion is there even a mention of its holding being broader than the stated habitat for migratory birds.

Under this new rule, no person in those agencies may assert Clean Water Act jurisdiction over so-called "isolated," intrastate, non-navigable waters, where the sole basis available for asserting jurisdiction rests on "any of the factors listed in the 'Migratory Bird Rule.'" Guidance, at p. 25 (emphasis added). Therefore, effective January 15, 2003, the rule on jurisdiction was instantaneously expanded from no jurisdiction based on habitat for migratory birds to (1) no jurisdiction based on habitat for migratory birds, (2) use of water as habitat for Federally protected endangered or threatened species and (3) use of the water to irrigate crops sold in interstate commerce. Such an expansion of no jurisdiction is not based on the Supreme Court law; neither is it pursuant to administrative or environmental procedural statutes.

In addition to the automatic "no jurisdiction" rule, the guidance also contains general instructions for another, broader category of jurisdictional factors. The guidance provides: "In addition, in view of the uncertainties after *SWANCC* concerning jurisdiction over isolated waters that are both intrastate and non-navigable based on other grounds listed in 33 C.F.R. § 328.3(a)(3)(i)-(iii), field staff should seek formal project-specific Headquarters approval prior to asserting jurisdiction over such waters, including permitting and enforcement actions." Guidance, at p. 25. The statement on its face reflects, again, the misreading of *SWANCC* to have caused such "uncertainties," when the Supreme Court made clear what its holding was. *SWANCC*, 531 U.S. at 174. And, similar to the rest of the guidance, this creates a new rule without any administrative or environmental procedural compliance

Such a rule by the General Counsels of EPA and the Army Corps of Engineers would certainly have a chilling effect on assertions of jurisdiction from the field and, indeed, appears to be designed to achieve precisely that result. Field staff are directed to call headquarters for instructions *only* when they plan to assert jurisdiction over this undefined category of "isolated" waters. If they plan to ignore the Clean Water Act and *not* assert jurisdiction, they do not have to ask permission or even inform headquarters. Further, the guidance says that "generally speaking" the agencies will continue to protect tributaries of navigable waters and their adjacent wetlands. (The exceptions to this "generally speaking" policy are not spelled out in the "guidance.") Once again, jurisdiction over these waters was not at issue in the Supreme Court's decision.

This vaguely-worded "guidance" will open the way for developers, mining companies, and other polluters to argue with the Corps and EPA that all kinds of wetlands, small streams, non-navigable ponds or other waters – perhaps even some tributaries – are "isolated." The case-by-case determination portion of the guidance does little to guide or instruct. It provides no advice on how to handle any specific situation. It merely recommends that where questions remain, "the regulated community should seek assistance from the agencies on questions of jurisdiction." The guidance will be used to try to allow destruction and pollution of waters that have been protected by the Clean Water Act and its regulations for 30 years.

Finally, the guidance comes into existence without any procedural and administrative legality. Although the agencies promise full APA rulemaking and National Environmental Policy Act (NEPA) compliance under the ANPRM, they do not hesitate to implement an entire new "no jurisdiction" rule under the guidance without satisfying either the APA or NEPA. The APA was promulgated so that federal agencies would be required to go through formal rulemaking, with an opportunity for public notice and comment, before thrusting a new rule upon members of the public. Under the guidance, however, the APA was ignored. A new jurisdictional rule was promulgated, and there was no opportunity for any member of the public to comment. NEPA was promulgated so that a decisionmaker would understand the environmental effects of his or her decision and to keep the public informed about decisionmaking. In promulgating their guidance, EPA and the Army Corps of Engineers gave no opportunity for the agencies to weigh the environmental consequences of their decision. It is particularly noteworthy that it will be hard for any member of the public to ever know what waters have been deemed as "non-jurisdictional" under the guidance, given that there is no way to determine which waters have been declared not under Clean Water Act jurisdiction since January 2003.

Discussion of the Case Law

In addition to announcing the new "no jurisdiction rule," the guidance also contemplates just how broadly *SWANCC* could be interpreted. The guidance talks broadly about different courts' decisions. Unfortunately, the guidance does little to distinguish between the cases that are currently under appeal by the government, and those that are settled law, and tends to speak of both types of cases as comparable even though the overwhelming majority of post-*SWANCC* decisions have supported the Department of Justice's position that the Supreme Court's decision does not require any change in existing rules. It does, however, appear that most -- if not all – of the cases favoring an expanded reading of *SWANCC* are currently under appeal. Therefore, the position of the United States, representing the EPA and Army Corps of Engineers, is that these lower court rulings were in error. That makes the citation of these district court cases for any other proposition somewhat disingenuous.

The conclusion of the discussion is that "[f]ield staff should continue to assert jurisdiction over traditional navigable water (and adjacent wetlands) and, generally speaking, their tributary systems (and adjacent wetlands)." Guidance, at p. 31. It is silent, however, about what law to apply. In fact, it simply lists out factors to be considered, including the "guidance, applicable regulations, and any additional relevant court decisions." Id.

Overall, the Guidance Document unlawfully issues a new "no jurisdiction" rule based on a misreading of Supreme Court law, violates the procedural requirements of the APA and NEPA, and portends even further erosion of federal environmental rules.

CONCLUSION

For the foregoing reasons, we urge EPA and the Corps not to go forward with a proposed rulemaking and to withdraw the Guidance attached to the ANPRM immediately.

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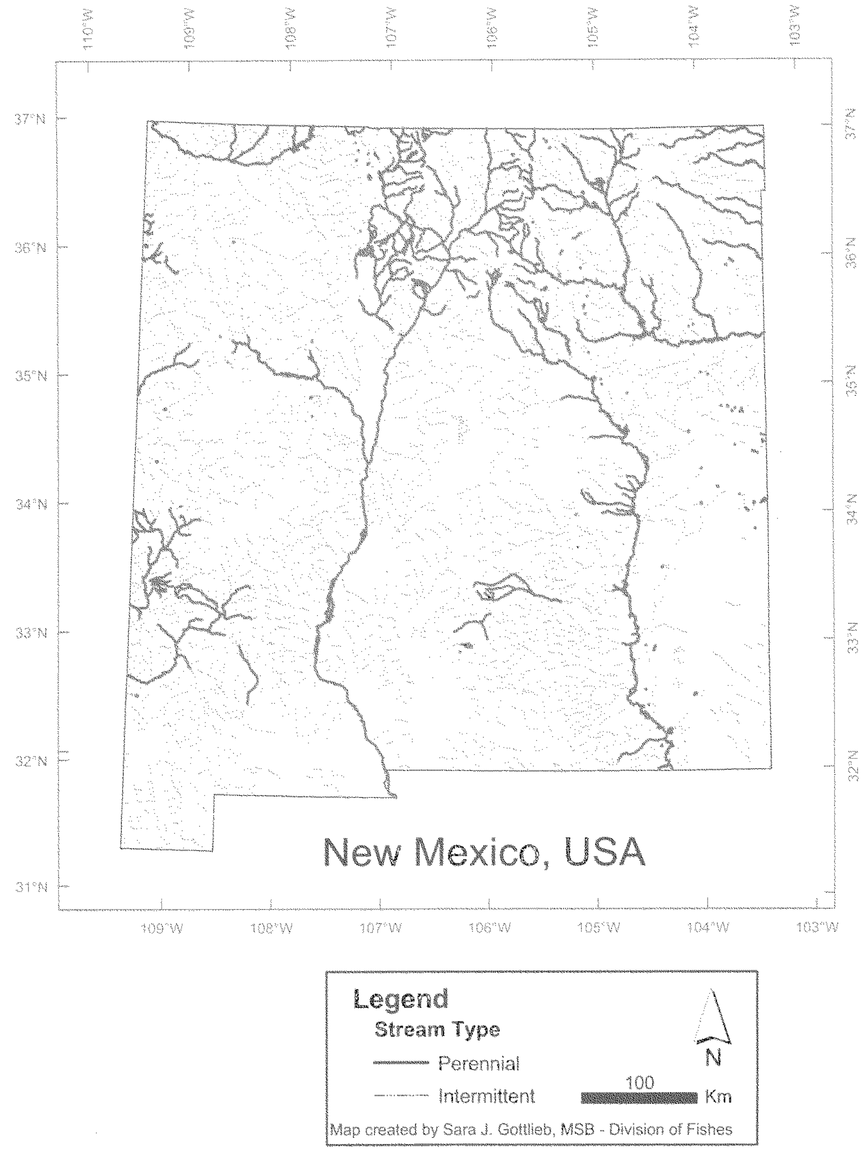
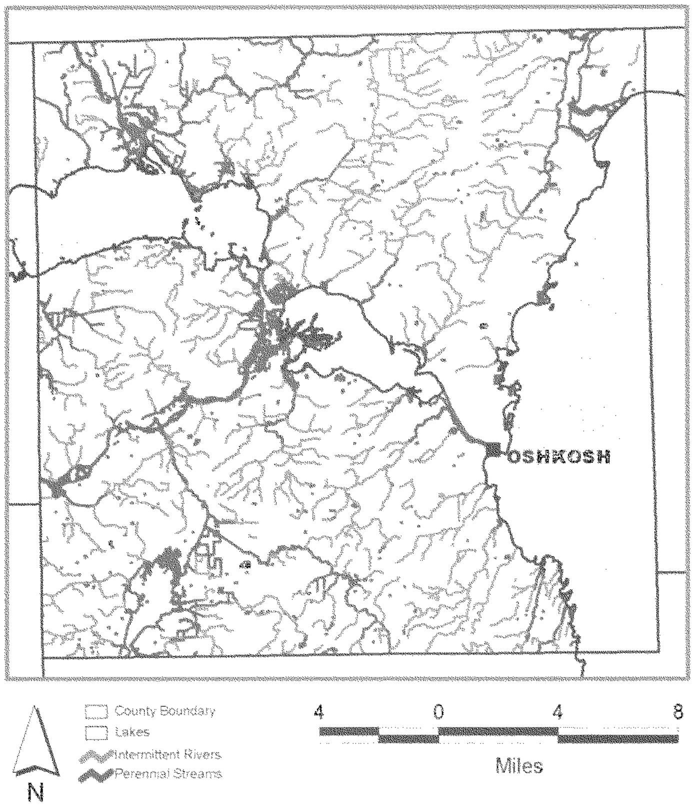


Map created by Sara J. Gottlieb, MSB - Division of Fishes

~ STEAMS IN WINNEBAGO COUNTY, WISCONSIN ~
INTERMITTENT: 530 MILES VS. PERENNIAL: 590 MILES



Data provided by Wisconsin Dept of Natural Resources, October 2000, at 1:24,000 scale
Projected in Wisconsin Transverse Mercator,
NAD83 Datum, meters. Manipulation by Ross
E. Freeman, American Rivers, Feb 2003

The Western Coalition of Arid States
W E S T C A S

Testimony
(submitted for the record)
Of
Charlie Nylander
President
Western Coalition of Arid States

On

The Status of the Nation's Waters,
Including Wetlands, Under the Jurisdiction of the Federal
Water Pollution Control Act

Before
The U.S. House of Representatives
Committee on Transportation and Infrastructure

July 17 and 19th, 2007

The Voice of Water Quality in the Arid West
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The Western Coalition of Arid States
WESTCAS

The Western Coalition of Arid States (WESTCAS) is submitting this testimony regarding The Status of the Nation's Waters, Including Wetlands, under the Jurisdiction of the Federal Water Pollution Control Act. This testimony is in response to proposals to amend the Federal Water Pollution Control Act to clarify the jurisdiction of the United States over waters of the United States, to provide a definition of Waters of the United States within the Clean Water Act.

The definition of Waters of the United States is of paramount importance for our member's states and the regulated entities (including municipalities), who will bear the cost of having no distinction between actual wet waters of the United States and the predominantly dry water courses that epitomize the arid west. Our members provide water and wastewater services in the arid west and in the process must manage water resources in various ways that will be severely impacted by the overly-broad proposed definition of Waters of the United States. Our members move water through canals and ditches that must be maintained, manage storm water through urban and rural environments, and discharge treated effluent to the otherwise naturally dry water courses. The increased costs, in time and money, of permitting activities associated with the affect of the proposed legislation and its impact on water resource management, provides no significant environmental benefit and is an unnecessary cost that will ultimately be borne by the residents of the arid western states.

WESTCAS is a coalition of approximately 125 water and wastewater districts, cities and towns, and professional associations focused on water quality and water quantity issues in the States of Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon and Texas. Our mission is to work with Federal, State and Regional water quality and quantity agencies to promote scientifically-sound laws, regulations, appropriations, and policies that protect public health and the environment in the arid West.

Legislative proposals seek to define the waters of the United States that are subject to the Federal Water Pollution Control Act by changing the applicability from "navigable waters" to "waters of the United States" and providing a definition of "waters of the United States."

> "Waters of the United States means all waters subject to the ebb and flow of the tide, the territorial seas, and all interstate and intrastate waters and their tributaries, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and all impoundments of the foregoing, to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution."

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The proposed definition unnecessarily broadens the scope of waters subject to the Clean Water Act and oversteps the balance of Federal authority with respect to States and their management of water resources. WESTCAS emphatically believes that the proposed definition of "waters of the United States" will lead to three significant types of impacts:

- Requiring Section 404 permits for ditch/canal/acequia operation and maintenance by including these previously non-jurisdictional water conveyance systems
- Impacting the ability of state and local governments to implement land use planning and zoning by applying to "activities affecting these waters"
- Further complicating Section 402 NPDES permits, particularly for storm water discharges, because the proposed legislation does not provide any clearly articulated definition of the extent of tributaries.

Impacts on Water Conveyances

Western water providers are dependent on moving water from one location to another in canals and ditches. Over the past decade, the population of the Western states has grown 19.7 percent—greater than any other region of the United States. The demand for water has increased just as dramatically, and is impacting the demand for increased water conveyance and inter-basin transfers. Aging infrastructure, increasing environmental mandates, serious forest fires, and prolonged drought conditions have added to this demand, threatening the very communities and economies established throughout the West.

A number of important factors applicable to the arid west should be considered regarding inter-basin water transfers and the operation of water conveyances:

- In 2000, about 9,500,000 acre-feet per year of surface water was used for public water supply in the arid west. Most of that surface water was delivered via water aqueducts or canals from within basins and inter-basin transfers.
- The rapid population growth in the arid west is challenging the districts and municipalities to provide quality utility services for water and wastewater due to the sheer number of potential customers, their water demands, and the volumes of wastewater produced requiring treatment.
- Environmental regulations and standards are continuing to become more stringent over time regarding both water supply and wastewater treatment, requiring more actions that increase the costs of water supply distribution and wastewater treatment and discharge.
- The population growth in the arid West has a significant component of retired and older citizens who are on a fixed and/or limited financial budget, and who cannot afford the escalating utility costs being distributed to the local customer base.

The expansion of Clean Water Act jurisdiction to these waters would impose Section 404, Dredge and Fill, requirements on the operations and maintenance of these water

conveyances. One of our members in Colorado who provides raw water through canals and ditches says "Perhaps of even greater consequence to my district is the extension of jurisdictional waters to canals, ditches, storm drains, etc. Both the "activities affecting" and the "to the fullest extent" language guarantees unintended consequences. Thousands of miles of manmade water conveyances in Colorado and throughout the arid west would be affected and the cost would depend on exactly how the expanded jurisdiction is interpreted. It's the unknowns that scare us all."
The expanded definition of "waters of the United States" could require a 404 permit application to be filed for each maintenance activities in order to obtain the maintenance exemption under 404(d). The USACE must conduct a review of all permit applications, often including site visits, before the USACE can issue the exemptions. The result is that for each of the western states thousands of new permit applications will be submitted annually to the USACE.

Impacts to Local Water Resource and Land Use Planning
The Clean Water Act clearly gives the States the primary responsibilities and rights to prevent water pollution and to plan the development of land and water resources. Section 101 (b) provides that the state have the "primary responsibilities and rights" to prevent water pollution and "plan the development and use…of land and water resources." 33 U.S.C. § 1251 (b). Section 101 (g) provides that the congressional "policy" is that "the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by" the statute. 33 U.S.C. § 1251 (g). States and local governments have traditionally been responsible for regulating water uses and local land uses. In regulating water uses, the States allocate water among different consumptive uses, such as urban or agricultural uses and also allocate water to protect environmental needs, such as fish and wildlife, recreation, and scenic beauty. In balancing these needs, the States make choices whether local water resources should be developed to promote local growth or instead retained in their natural condition as part of the environmental heritage, and they respond to the public in developing the balance between competing needs.

At the local level, local governments are responsible for approving development projects, such as residential and commercial developments, that will provide housing and accommodate economic growth and environmental preservation, including preservation of wetlands and other water resources in their natural condition. The local governments may approve development projects because the public benefits outweigh the environmental harm or they may disapprove projects because the environmental costs are unacceptably high. They will approve projects subject to conditions to avoid or mitigate the environmental harm.

These water resource and land use decisions are properly made at the state and local level because they involve resources, including local waters, which have purely local rather than national effects. The Senate and House bills proposed amendment of the

Clean Water Act threatens to change this long-accepted regime by authorizing Federal agencies to regulate local, intrastate, non-navigable waters and activities that affect these waters even where there is no conceivable national or Federal interest at stake. This diminishes the traditional authority of state and local governments to regulate local land and water resources, and disturbs the balance between the Federal government and the States with regard to the legislative intent of the Clean Water Act. It has been long-held that decisions affecting the use of local resources having primarily local effects are better made at the local rather than the national level

Tributaries and Section 402 Permits

WESTCAS members operate storm sewers and other municipal facilities that discharge into desert washes, drainage ditches, concrete-lined flood-control channels and other areas that are normally dry. Under current federal and state law, these dry channels are already invariably characterized as "waters of the United States" by state agencies, the US Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE). Dry channels thereby become regulated under the Clean Water Act. Despite their dryness, these "waters" take on the regulatory classification of the wet bodies of water downstream, and become classified for fishing, swimming, and other uses such as drinking-water supply. These classifications, and the criteria established to protect them, are known as "water quality standards". WESTCAS members are issued Federal and State permits prohibiting the discharge of any substance in concentrations that might interfere with fishing or swimming in the dry channel, or otherwise cause the channel to exceed applicable water quality standards. In this way, Federal and State agencies declare that dry channels of the arid west must be protected for fishing and swimming, and exercise their authority to impose and enforce Clean Water Act requirements intended for wet waters.

Without the proposed legislation changing the definition of "waters of the United States", discharges into dry channels are at present more heavily regulated than most discharges into wet waters. Regulators do not need to impose special requirements on most discharges into wet waters, where the discharge is diluted and quickly assimilated without causing violations of water quality standards. Because dry channels lack water for dilution, regulators may impose special requirements to ensure that the dry channel does not exceed its water-quality standards and that the classified used are fully protected. These standards are applied currently because the dry channels are considered tributaries of "waters of the United States".

In various Courts of Appeal cases, the term "tributary" has been defined differently. The Sixth and Fourth Circuits have held that large expanses of dry lands, which have the presence of a hydrological connection which can be established by artificial "tributaries" such as roadside ditches and drains, may be classified as tributaries. By defining "tributary" to include artificial channels, they extend the concept not only to roadside ditches and irrigation canals, but arguably also to urban gutters, concreted storm drains, and even underground storm sewers. By defining "tributaries" to include intermittent hydrological connections and the ability to move water downstream, these cases extend "waters of the United States" to cover virtually all dry land. Because with few exceptions, rain falls on land and then flows downhill, potentially if not eventually reaching a water and thereby establishing an intermittent connection. Surely Congress does not intend to apply the Clean Water Act to deserts, mountain peaks, urban streets and all the otherwise dry land where rain falls and runs off. Dry land should not be included as a *water* of the United States.

The Fifth Circuit, in comparison, has properly held that dry land and intermittent creeks are not waters of the United States. This Court held that tributary waters should be treated as within the jurisdiction of the Clean Water Act only when they are so "inseparably bound up" that a discharge to a tributary will produce imminent, actual, identifiable and significant contamination in a navigable water.

Downstream waters are already protected under the Clean Water Act. When point-source discharges into tributaries flow far enough to reach a water of the United States (currently navigable water), they are regulated directly as discharges into navigable waters. Discharges that are eventually carried to navigable waters by storm water runoff are regulated indirectly through the permitting of storm water discharges. Both waters are also within the jurisdiction of state and local governments, which regulate the discharge of wastes into water and the dumping of wastes onto the ground. Therefore, waters of the United States are protected without categorizing dry land as waters of the United States.

Without further refining of the definition of "waters of the United States", water in storm water conveyances and in storm sewers beneath of cities are waters of the United States. These waters are subject to water quality standards and permitting requirements within the pipes that the water flows in because they become "tributaries" of the receiving waters. Obviously, a clear definition of "waters of the United States" that addresses the extent and significance of tributaries is critical in determining the jurisdiction and application of the Clean Water Act, particularly Section 402 and 404 permitting programs. The existing statutory and regulatory protections of waters of the United States argue for a tributary definition that limits the Clean Water Act jurisdiction to "wet flowing waters" that have a "significant nexus" to navigable waters. Respectfully, WESTCAS submits that a clear, yet reasonable, definition is required.

WESTCAS thanks you for the opportunity to provide this statement for the hearing record and WESTCAS would like to work with the Committee as you move forward in addressing this issue legislatively. We bring a unique and important perspective to an issue of paramount importance to the West.

STATUS OF THE NATION'S WATERS INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

Thursday, July 19, 2007

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The Committee met, pursuant to call, at 2:05 p.m., in Room 2167, Rayburn House Office Building, Hon. James Oberstar [Chairman of the Committee] Presiding.

Ms. JOHNSON OF TEXAS. [Presiding.] Good afternoon. I would like to welcome today's witnesses to our hearing, and, I am certain, the Ranking Member. Today we will hear from former EPA Administrator Carol Browner, scientists, and other interested stakeholders. In addition to this being an important issue in its own right, I am also looking forward to learning more about the original purpose and intent of the Federal Water Pollution Control Act Amendments of 1972, more commonly known as the Clean Water Act. Our witnesses here today will provide informative testimony on where the Clean Water Act has worked and where it needs to be improved.

Members of the Committee, while the 1972 Clean Water Act Amendments were passed many years ago, and while those laws and regulations worked quite well for a long period, times have changed. In recent years the Supreme Court has stepped in and subverted the purpose and protections of the Clean Water Act. Like water under a bridge, congressional intent was simply washed away. When the Court makes decisions that are driven by ideology, driven by politics, it makes a mistake.

Sadly, though, we know all too well the ramifications of the Bush v. Gore decision. We will soon see the mess that is a result of the Rapanos and Carabell decisions.

The Rapanos decision and the muddy guidance that has followed will only result in continued confusion and added expense for the regulated community. This, Members of the Committee, is confusion that simply did not exist prior to 2001, the SWANCC decision. And it is not just regulatory confusion that has resulted from these decisions.

Grave environmental harm, damage to our streams and wetlands have come about from the unwarranted actions taken by the Court. The issue is a matter of clean drinking water for all of this country's citizens, and it is a matter of protecting our so very valuable water resources. I look forward to today's hearing to learn more about the implications of these Court decisions on the important issue of wetlands and water quality protection. Thank you.

The Chair now recognizes Mr. Baker.

Mr. BAKER. I thank the gentlelady for recognition, and appreciate the willingness of the Chair to again convene a hearing on this important matter. This is the second in a series, and I think will help the Committee to better understand the important issues before us.

I would like to perhaps review the history of the matter from a slightly different perspective. From the 1899 Harbors and Rivers Act to the 1972 Clean Water Amendments, the history was fairly clear and certain. As a result of the 1972 amendments and the congressional debate that ensued with the adoption of that act, the Corps took one direction with regard to rules promulgation, while the EPA was in a slightly different perspective. The resulting conflict between the two agency interpretations was litigation in the District Court of D.C., which consequently ordered the Corps to take on a more aggressive regulatory posture.

From that point forward, there was much uncertainty as to what constitutes a navigable water of the United States subject to the authority of the Clean Water Act. And from my reading of the Supreme Court cases over time, it becomes clear that navigable waters does in fact mean navigable as to use, or may become navigable with minor modifications to the water system. That was again extended to tributaries of the navigable waterway, to wetlands that abut a navigable waterway.

But throughout all court findings, the term "navigable waterway" is the building block upon which jurisdiction of the Clean Water Act flowed. The SWANCC and Rapanos cases did in fact reach an appropriate balance, in my view, in restoration of the responsibilities of the States to act in preserving environmental quality as well as better defining the role of the Federal Government by not extending coverage to isolated waters or wetlands.

Although there appears to be some confusion as to the current meaning of the Court's findings, it is clear to me that there is a perhaps more appropriate balance between State and Federal role and between private property ownership and public interest.

We should tread carefully as we move forward. As I am from a State which relies to great extent on water quality, fisheries and our navigability of our most important asset, the Mississippi River, we do have great interest in preserving water quality within reasonable bounds. However, the bureaucratic decisions in many cases, identifying tractor tire ruts across a wet field, which subsequently fill with water as a wetlands subject to the Clean Water Act jurisdiction, do not lead one to conclude that logic is always applied in these matters.

And so I am anxious to work with the Chair to find a reasonable balance in moving forward to ensure that private property rights are regarded, that the States are given full responsibility for supervision of their own environmental habitat, and that the Federal role is relegated behind those two in order to preserve environmental balance.

I appreciate the opportunity to participate, Madam Chair, and yield back my time.

Ms. JOHNSON OF TEXAS. Thank you very much.

Mr. Bishop?

Mr. BISHOP. I will submit a statement for the record, Madam Chair, thank you very much.

Ms. JOHNSON OF TEXAS. Thank you very much.

Mr. Higgins, would you have an opening statement?

Mr. HIGGINS. I will just submit a statement for the record as well, Madam Chair. Thank you.

Ms. JOHNSON OF TEXAS. Okay.

Anyone else? Yes, Mr. Westmoreland.

Mr. WESTMORELAND. Thank you, Madam Chair. And I would like to thank you for holding this series of hearings and the proposal to adjust the Clean Water Act. I want to thank Ms. Browner for being here also to testify. I am looking forward to hearing your testimony.

However this legislation's objectives are alarming. I have several questions and concerns that I want to address. The bill overtly intends to expand the Clean Water Act which has maintained our Nation's waters for 35 years. If we remove the word ″navigable,″ which is used 81 times in the clean water legislation—so I don't think it was misunderstood that ″navigable″ was supposed to be in there—it will result in the expansion of the Clean Water Act since the 1972 inception.

If we replace ″navigable waters″ with ″waters of the United States,″ and expand the scope of Federal jurisdiction to its maximum limits under the Constitution, the bill would effectively negate decades of jurisprudence. This will become the courts to decide the constitutional limits of Federal jurisdiction under the Clean Water Act, at a great cost to the American people. And as the Chairlady spoke today, it would end up back in the high Court, and presumably with the same result.

The Chairman's bill claims to restore the original intent of Congress. And I don't know how much more the original intent could be than to use a term 81 times. But the reality is that the bill is only broadening the jurisdiction of the Clean Water Act to cover any and every wet area of the United States, the most troubling of all has yet to come. The business and activities of farmers, ranchers, road builders, property owners, water planners, and so on will be all included under this new expansion of government.

The only way to decide if water is subject to the new terms would be through excessive permitting and oversight, and of course costly and time-consuming litigation. The Chairlady spoke about the court cases. Those court cases were to stop the overreach of the EPA, Fish and Wildlife, and the Corps. It was trying to show them that there were bounds under the Clean Water Act that they had to work within. They weren't destroying the Clean Water Act. These agencies were reaching over the bounds that the constitutional authority of Congress gave them.

And, Madam Chairman, what we are talking about with this proposal, and I have only been here 3 years, but I think this is the most devastating proposal to the people who grow our food chain that I have seen. But this will give EPA and the Corps of Engineers the authority over every wet piece of property in our United States. That is something that I hope we can stop, and that we can work together to negotiate a solution that we can all live with, work with.

I think we need to look at the original Clean Water Act, clarify some of the stuff in that to make sure that EPA and the Corps knows their regulations.

Now, let me say this. I have projects that I know of that people have been working on for 30 years trying to get a 404 permit. Thirty years. That is too long. And it is a process, and it is a bureaucratic process, and it is the expansion of government that is causing people to go without drinking water today.

So with that, Madam Chairman, I yield back the balance of my time, and I look forward to the testimony.

Ms. JOHNSON OF TEXAS. Thank you very much, Mr. Westmoreland.

The Chair now recognizes Ms. Matsui.

Ms. MATSUI. Thank you, Madam Chair. I think this is a very important hearing. The Clean Water Act has been the subject of quite a bit of legislative speculation quite recently, as well as legal interpretation over the years. And one thing I believe that hits a lot of us as we deal with our districts and our constituents is we can agree that the permitting process is not equally administered everywhere, and in some districts it is broken and needs to be fixed.

What those fixes are and how they are made are issues that all of us will have to work through. What is clear is that we need to start somewhere in addressing the immediate and long-term water quality issues facing our country and our communities.

My district is Sacramento, California, located at the confluence of two rivers, the Sacramento and the American. As my colleagues have heard me say before, we are the most at-risk river city for catastrophic flooding in the country. The Sacramento region and the Sacramento River watershed as a whole is undergoing dynamic changes. We are experiencing a huge population growth. We expect almost 2 million more people in the Sacramento region alone in the next 4 years.

As we grow, we need to make sure the tools, whether they be policy or regulatory, are in place so that communities like Sacramento can address this type of growth and ensure that the overall health of our watershed and its communities remain intact.

Today's hearing is a good step in sharing perspectives, concerns, and experiences in this complex area, and I look forward to working with Madam Chairman on these issues as we move forward, and I look forward to hearing today's witnesses.

And I thank you very much, and I yield back.

Ms. JOHNSON OF TEXAS. Thank you very much.

I would like to, at the request of our Chairman——

Mr. BISHOP. Would the Chairman yield for a second? Thank you.

I was very interested and truly troubled to hear Mr. Westmoreland's comments about a 30-year delay. And could I ask that you submit to the Committee the details of the case or cases that have a 30-year delay? I think all of us on the Committee would like to see those.

Mr. WESTMORELAND. I have those coming.

Mr. BISHOP. Thank you very much. I appreciate that. Thank you for yielding.

[Information follows:]

LAKE MCINTOSH, GEORGIA

TIMELINE

Congressman Lynn Westmoreland (GA-03)

***this is a comprehensive outline describing the permitting process for Lake McIntosh to be utilized as water supply for local residents.**

1970: Phipps Corporation sold Peachtree City to Garden Land Cities Corporation which then proposed Lake McIntosh as a water supply reservoir.

1972: A portion of the reservoir site was cleared, Line Creek rerouted, and construction on the dam foundation began.

1976: Project abandoned due to a recession in the real estate market and Garden Land Cities Corporation goes bankrupt. The parent companies of Garden Land Cities Corporation obtained the property with Bessemer Land Corporation obtaining the land in Coweta County and Equitable obtaining the land in Fayette County.

1978: Fayette County saw need for improved water supplies, as it can only supply 0.5 mgd (million gallon per day) to its citizens.

1979: Fayette County started its public water system. Secured loan and grant from Farmer's Home to build a water supply reservoir. County negotiated with Equitable-Life to take over project.

1981: Opposition developed among affected Coweta County property owners.

1982: The County proposed construction of Lake McIntosh – acquired bulk of property, prepared preliminary dam plans, performed Archaeological, Botanical, and Wildlife survey, and submitted a Section 404 Permit application. After filing the 404 permit application for permission to fill/inundate the streams and wetlands associated with the project, the Colonel of the Army Corps of Engineers, Savannah District suggested that the application be withdrawn until Fayette County had informed/negotiated with all of the adjacent landowners and held informative public information meetings. Upon the recommendation of the Corps, the County withdrew its 404 application.

1983: Based on the Corps recommendation, the County began acquiring the land necessary to construct the Lake McIntosh project. Fayette County obtained land from Bessemer in Coweta County and the majority of the remainder land over the next several years. The County pursued land acquisition without any indication of success of the 404 permit process.

1984: Farmers Home pressured Fayette County to either construct a lake or lose their funding. The County had been experiencing some difficulties negotiating with Equitable's local representation in acquiring its land. Given the continued resistance and the County's immediate need for water, the County constructed Lake Kedron as a short term solution to the County's water problem.

1986: Lake Kedron was constructed with the idea of building Lake McIntosh in the future. Lake Kedron was constructed as a short term remedy to the County's water supply issue. The ability to quickly acquire the necessary property and clear regulatory hurdles caused this reservoir to be constructed in place of Lake McIntosh. (The County's location within the Piedmont eco-region of Georgia does not provide for extensive water supply opportunities. Lake McIntosh was always part of the County's plan to provide for the water needs of its residents. Therefore, it was always the intention of the County to construct the Lake McIntosh project. Only within the permitting process did other reservoirs get constructed before McIntosh.)

1987: With Lake Kedron, Fayette County now had the capacity to produce 4.5 mgd.

1989: President George H. W. Bush sets a goal of "no net loss" of wetlands (regarding conservation losses and gains).

1989: The county submitted, to USACE, a new application to permit Lake McIntosh. (The previous application had been withdrawn upon the recommendation of the Corps.)

1989: Land Acquisition completed for Lake McIntosh. Throughout all of the 404 permitting processes land acquisition for the McIntosh project was ongoing.

1992: Oval pigtoe species found in Coweta County in Line Creek at Hwy. 54 crossing. This survey was conducted while the permit was pending to address the historical records of species found in Line Creek. Shinyrayed pocketbook mussel species found in Coweta County in Line Creek at GA Route 74, GA Route 85, and GA Route 16. This survey was also conducted while the permit was pending to address the historical records of species found in Line Creek.

December 23, 1992: Lake Horton permitted as preferred alternative. A consultant became involved and determined that the least environmentally damaging practicable alternative was Lake Horton rather than Lake McIntosh. With approximately twice the yield and over 100 acres less of wetland impacts, Lake Horton was constructed in 1996. By this time, Fayette County's population had been experiencing extreme growth, making it apparent that additional water supplies, even beyond even Lake Horton, would be necessary to meet the future demands.

1993: Bob Butler, an employee of the FWS, along with several other employees of FWS, conducted surveys all over the southeast to determine the presence of mussel species believed to be disappearing from the region. Butler conducted a survey for freshwater mussels endemic to eastern Gulf Slope drainages of the Apalachicolan Region of southeast Alabama, southwest Georgia, and north Florida. Since the Lake McIntosh reservoir project was still being proposed, a representative from Fayette County was present during the surveys. These surveys served as the foundation for the proposed listing for federal protection of the species.

January 18, 1995: Letter stating DOI will do a mussel survey for proposed McIntosh site in Line Creek. Since the project was well known at this point, DOI coordinated with Fayette County so as to minimize any objections as to how the survey was conducted.

September 25, 1995: Mussel experts visited sites in Line Creek, Whitewater Creek, and the Flint River.

January 18, 1996: Survey Report was published. Only 1 specimen of the Shinyrayed pocketbook was found in Line Creek (at Ga. Route 85).

May 1997: Fayette County Water System Stream Monitoring Program was initiated.

1998: Fayette County Official Government website- Water System Storage Improvements- Started 404 permit process for Lake McIntosh. **Note- the original permit application was filed in 1989 for Lake McIntosh. Lake Horton was discovered to be a less environmentally damaging practicable alternative as opposed to Lake McIntosh. The Lake McIntosh permit was amended to reflect that discovery and Horton was permitted in 1992 and constructed in 1996. The re-initiation of the McIntosh project began in 1998. It took a significant amount of time to find adequate compensatory mitigation to submit with the 404 application.

March 16, 1998: Shinyrayed pocketbook and Oval pigtoe were listed in the Federal Register, Volume 63, No. 50, page 12664.

March 16, 1998: Excerpt from Federal Register Listing: "...there is very little suitable habitat in the area to be affected by the proposed dam and reservoir. One live Shinyrayed pocketbook was found several miles downstream of the proposed dam site, but the Service did not believe the proposed project will affect this area. Therefore, listing of this species will not affect the project [Lake McIntosh]." This statement is from the Federal Register excerpt of the listing of the species under the Endangered Species Act. This statement was published as a result of the agreement between the FWS and the County. The County withheld opposing the listing of the species so long as the FWS would not oppose the project on the condition of potentially impacting the species. This statement was supposed to allow the project to proceed without further delays from FWS.

August 28, 1998: Cultural resources report for the Lake McIntosh project was completed. A complete review of the entire 610 acres had to be complete to satisfy the Section 106 Cultural resource requirements.

October 1999: A Shinyrayed pocketbook was found in Line Creek at GA Route 16 and it was confirmed Shinyrayed pocketbooks remained at GA Route 85. This confirmed that these protected species were in the creek and would potentially be impacted by the project.

November 13, 2000: Mussel survey performed in Line Creek for TDK Boulevard extension – no endangered or threatened species found. This shows that further downstream in Line Creek the species that had previously been found are no longer present.

2001: During the drought, the City of Fayetteville's own water supply (groundwater wells) became unusable and the City was forced to rely on water from Lake Horton. For some 120 days. the City of Fayetteville became completely dependant on Lake Horton. (Fayetteville initially had vehemently opposed the County's reservoir projects. Fayetteville had said that Lake Horton was unnecessary and chose to secure additional groundwater supplies as its reliable source. During the drought, the wells were unusable due to water quality concerns and the City was forced to rely on the water supply reservoir that it had opposed.)

March 22, 2001: Lake McIntosh withdrawal Permit was modified to 8 mgd.

May 2001: Lake McIntosh was listed in the GA DNR White Paper. The white paper was written to address and revise the State of Georgia's 20 year old minimum instream flow criteria. In the past, the stream's seven-day, ten-year minimum flow was the basis of the instream protection rule. With the white paper, all new applications for non-farm water withdrawals from new sources, or expanded use of existing surface water sources would be required to meet new interim minimum flow protection requirements. These new standards did not apply to any applicant who had a pending surface water withdrawal application or 404 permit application. By being grandfathered under the old instream flow policy, the McIntosh project would not have to release as much water downstream and would be able to supply more water to the residents of

Fayette County. In the end, because of concerns for downstream endangered species, the County committed to release in excess of what was required under this paper.

October 3, 2002: A Joint Public Notice was issued for Lake McIntosh. The JPN issued was for the 404 permit under the Corps authority.

October 29, 2002: Fayette County held a Public Information meeting on Lake McIntosh. A presentation was given by the County's consultants and a question and answer session provided a public forum for comments. This was done by the County so that the Corps would not have to hold a separate public hearing. The County provided notice for several weeks prior to the meeting to allow the public adequate time to plan to participate in the meeting. Members of the Corps were present at the meeting.

November 25, 2002: An interagency site visit conducted. Members of the Corps, FWS, EPA, and GA EPD were all present. This afforded the representatives of the various federal and state agencies an opportunity to see the site and any anticipated impacts.

January 28, 2003: Comments on Lake McIntosh forwarded to applicant. The comment period under the 404 process had ended and the Corps forwarded all of the comments received during the process to the applicant, Fayette County.

February 26, 2003: Response to comments filed. The applicant had 30 days from receipt of comments to file its responses. This was the applicant's opportunity to discuss any criticism that was expressed during the comment period.

August 2003: Burns & McDonnell completed Hydrologic Impacts of Proposed Lake McIntosh for U.S. Fish & Wildlife Service – Report concluded minimal impact on downstream flows. This report was paid for by FWS. The report incorporated withdrawals for the City of Newnan and Fayette County in excess of the actual flow in the creek and still concluded that the reservoir project would result in minimal impacts to the creek.

January 11, 2005: Steve Parris (FWS) made informal statement at Interagency Meeting that FWS has not officially signed off on Lake McIntosh and is not bound by the Federal Register. He stated that an additional mussel survey was required. The Federal Register notice that announced the listing of the mussel species as protected clearly stated that the listing of the mussels would not impact the Lake McIntosh project. Fayette County had been proceeding since that time as though the issue surrounding the mussels in Line Creek was resolved. Parris's comment was the first comment since the listing of the species and the agreement between FWS and Fayette County, that additional surveys would be required to permit the reservoir project. These surveys would add additional costs and time delays. This position essentially disregarded the earlier agreement between FWS and the County but only after it was too late for the County to oppose the listing of the species.

February 15, 2005: Schnabel Engineering completed a Safe Yield Analysis and In-stream Flow Modeling, and concluded there would be minimal impact.

March, 2005: Withdrawal application was modified to 10.4 mgd.

April 1, 2005: Meeting at the Southeast Region office of the FWS to discuss the project and potential impacts to listed mussels. FWS took the position that further mussel surveys were not necessary but it would be assumed that listed mussels are present in Line Creek based on the most recent (1995) survey.

June 16, 2005: Conference call to discuss various in-stream models and answer questions on the models. FWS personnel advised the applicant's agents that predicted low flow below the dam may affect mussels.

July 23, 2005: FWS personnel met with representatives of the Corps, the GA Environmental Protection Division, and agents of Fayette County at the Corps' office to discuss the status of the project. Service personnel confirmed that an additional mussel survey was not necessary but that it would be assumed listed mussels were in Line Creek based on the 1995 survey.

September-November 2005: Fayette County commissioned a new survey for the protected mussels in line Creek. No species were found.

October 17, 2005: With the FWS position now being that the Federal Register did not preclude the requirement of formal consultation, the Corps requested and FWS received the request to initiate formal consultation.

January 13, 2006: Initial biological opinion was issued under formal consultation of the Endangered Species Act.

May 5, 2006: 8 federally-listed endangered Oval Pigtoe mussels were found in Line Creek immediately south of the Peachtree City airport. This survey was done for the expansion of the airport, not the reservoir project. This reinitiated formal consultation under the Endangered Species Act.

May 3, 2006: MOA regarding cultural resources was executed. Included signatures from Fayette County, USACE, and GA Department of Natural Resources, Historic Preservation Division.

September 6, 2006: Georgia EPD issues a water withdrawal permit and 401, water quality certification. These are the two items that provide state approval of the project.

October 23, 2006: An amendment to the Biological Opinion was issued by FWS. This contained all of the revisions to the "reasonable and prudent" measures as well as revised terms and conditions for the project. This concluded Section 7 formal consultation under the Endangered Species Act.

June 28, 2007: The 404 Permit finally issued for the project.

Ms. JOHNSON OF TEXAS. Thank you. Our Chair is unable to be here. Just before I introduce our first witness, I will read his statement. Unfortunately, due to a variety of reasons and scheduling conflicts, only our esteemed colleague, Administrator Browner, was able to join us this afternoon. However, I ask unanimous consent that the testimony of former Administrators William Ruckelshaus, Russell Train, and William Reilly, as well as former Assistant Administrators for EPA's Office of Water, Bob Perciasepe and G. Tracy Meehan, be a part of the hearing record.

Any objections? Hearing none, so ordered.

Combined, the testimony of these four Administrators and two Assistant Administrators span the nearly 35 years of implementation of the Clean Water Act, and represent both Republican and Democratic administrations charged with protecting the Nation's waters.

I would like to read a few excerpts from the testimony for my colleagues to consider. First, from William Ruckelshaus, former EPA Administrator for both the Nixon and Reagan administrations:

″EPA supported a broad definition of 'navigable waters' as 'waters of the U.S.' Like Congress, we recognized that the chemical, physical, and biological integrity of the Nation's waters could not be maintained and restored unless pollutants could be controlled at the source, before they entered traditionally navigable waters. To faithfully interpret the key jurisdictional term 'navigable waters' that Congress had just broadly redefined as 'waters of the United States,' EPA proposed a regulatory definition of the term ″waters of the United States″ that included interstate and intrastate waters. Broad Clean Water Act jurisdiction is not only necessary to clean up the Nation's waters, it is necessary to ensure that the responsibility for maintaining and restoring clean water is shared equitably throughout the watershed and from State to State.

"In passing the Clean Water Act, Congress recognized that the State-by-State approach to water pollution control had failed, and that it was necessary to maintain a Federal floor for water pollution control to ensure that discharges in one State do not jeopardize water quality in another."

Next, from Russell Train, former Chairman of the Council on Environmental Quality, and former EPA Administrator during the Ford administration:

"A fundamental element of the Clean Water Act is broad jurisdiction over water for pollution control purposes. It has been well established that water moves in interrelated and interdependent hydrologic cycles and it is therefore essential that pollutants be controlled at their source to prevent contamination of downstream waters. When focusing on controlling pollutants, navigable waters, portions of those waters, their tributaries, and wetlands all must be included in the scope of protected waters. If we did not protect these streams, creeks, and wetlands, the course of abating pollution in this country would be much more difficult and more expensive because of the additional costs of technological fixes that would be necessary and in the absence of what nature has provided. Simply put, we cannot protect and restore our Nation's water resources without providing appropriate safeguards for the entire resource.

“Comprehensive jurisdiction is necessary to protect the natural environment. It is also important to avoid unfair competition. Unless Federal jurisdiction is uniformly implemented for all waters, discharges located on nonnavigable tributaries from larger rivers, lakes, and other water bodies would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors. Artificially limiting jurisdiction to only certain waters will create comprehensive disadvantages for certain dischargers.”

Also, from William Reilly, former EPA Administrator during the first Bush administration, and participant in the creation of the national goal of “no less loss of wetlands:”

“EPA has worked closely with the States over the last 30 years to make steady progress in reducing water-borne contamination and restoring the commercial, recreational, and ecological health of our country’s aquatic resources. This successful Federal-State partnership and the long-settled administrative practices on which it is built should not be weakened by an excessively narrow interpretation of the Clean Water Act.

“Since the Clean Water Act passed, U.S. courts and regulatory agencies have consistently complied with Congress’ intent by interpreting the term ’navigable waters’ to cover all interconnected waters, including nonnavigable tributaries and their adjacent wetlands, as well as other waters with ecological, recreational, and commercial values, such as so-called ‘isolated’ wetlands and closed basin watersheds common in the Western United States.

“This interpretation of the statute’s jurisdiction is to ensure a robust State-Federal partnership. The key phrase at issue, ’waters of the United States,’ applies to all the water pollution control programs established in the Clean Water Act, not just the wetlands permit program.

“Perhaps the most important implication of any change to the definition of ’waters of the United States’ is found by looking at the Act’s basic prohibition against discharging pollutants into waters without a permit in the National Pollution Discharge Elimination System (NPDES) program established by section 402 of the Act and the Act’s water quality requirements.

“By using a broad definition of ’waters of the United States,’ Congress recognized the need to address pollution at its source, no matter what size water. In reality, there are few isolated waters. Indeed, many are linked in their hydrology.

Congress needs to step up to clarify its intent. It is reasonable and sensible to have a broad definition of ’waters of the United States’ for the purposes of the Clean Water Act. The goals of the Act require it. We need the commonsense approach that Congress intended the Clean Water Act to protect our Nation’s waters broadly so that we can reduce discharges of pollutants and ultimately achieve the goals of the Act, making all waters swimmable, fishable, and safe for other uses.”

And finally, from G. Tracy Meehan, former Administrator for the Office of Water during the current Bush administration:

“Mandating navigability as a basis of jurisdiction is inconsistent with the Act’s overall objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation’s waters.

It is an artifact of an earlier law, dating back to the 19th century, which was designed to avoid obstacles to waterborne commerce rather than to implement integrated watershed management or environmental protection.

"I believe that our unique approach to 'environmental federalism' under the Clean Water Act, and a science-based watershed approach to protecting America's aquatic resources, merit congressional action to clarify an extremely confusing and Byzantine situation which now exists in our law and regulation."

I thank my colleagues and our witness for their indulgence. This is requested by our Chairman, and which is completed.

I now recognize Congresswoman Norton.

Ms. NORTON. I thank you, Madam Chairman. I had desired to stay at this hearing. I have another hearing. And I did want to make a short opening statement because of the nexus between what has been reported in chlorine spikes in water here in the Nation's Capital this very day and the condition of the Potomac River.

Lest we believe that rigid circumvention of the definition of a river or a waterway is the way to health and safety for the American people, we have already had a water scare in this region, a lead water scare, where people were not informed of lead spikes. And we are using a new chlorine in the river they want to refine.

There is a report this morning of chlorine toxins found in water by a national environmental group. With 1.1 million consumers, including the Federal sector, northern Virginia, and, of course, the residents of the District of Columbia, the Agency is very much between a rock and a hard place. The chlorine toxins come from what is necessary in order to make drinkable water from the Potomac River. Now, if that water gets toxins of every kind, in order to make sure we are not truly in a Third World country, you pour in all kinds of chemicals. And now you get another reaction.

What is the answer? All informed experts say the answer is go to the water itself. You will always find yourself, it would appear, in the position we in this region are in. We have responded to lead in the water, we have responded to toxins in the water with a chlorine chemical. It now is producing the possibility of chlorine toxins. That kind of seesaw is as dangerous to the health and safety of those in this region, and we are informed that this is the choice in other regions as well where this particular derivative is being used as what we are trying to combat.

The answer is that there is no way to avoid the source of the problem. The source of the problem is in the water itself. We will never decontaminate enough the water without, in fact, producing new issues for us. And in the process we do not know how many men, women, and children, and especially children, may be put in danger.

So I could not be more grateful for this hearing, this series of hearings, to deal with water and try to correct the Supreme Court decision.

Ms. JOHNSON OF TEXAS. Thank you very much, Congresswoman.

Now the Committee will hear from our witnesses. Our first panelist is the Honorable Carol Browner, who is a principal at The Albright Group, but she was the Administrator under the Clinton administration of EPA. Thank you for being here, and you can begin your testimony.

TESTIMONY OF CAROL M. BROWNER, PRINCIPAL, THE ALBRIGHT GROUP, LLC; AND FORMER ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

Ms. BROWNER. Thank you very much, Madam Chair, and Congressman Baker, and Members of the Committee, for the opportunity to speak to you today about the status of our Nation's waters. If I might take a moment to congratulate Chairman Oberstar for his lifelong leadership on the issue of clean water for the people of this country. In fact, I think it dates back to his role as a staff person here before he was even elected, a quite admirable commitment.

I want to speak to you today as a former Administrator of the Environmental Protection Agency, and I specifically want to lend my support to Chairman Oberstar's bill, which reaffirms the long understanding of which waters in this country are protected by the Clean Water Act.

As the Chairwoman noted, I am joined in supporting this bill by a number of former Administrators, both Democrats and Republicans, and by the former Deputy Administrator for Water under the current administration. The issue that has brought us here is obviously the Supreme Court decisions as they relate to wetlands. And there is no denying the importance of wetlands for our Nation's public health, our economy, our ecosystems.

Wetlands protect and purify our waters, they shield our homes and businesses from flooding, and they provide valuable habitat to a wide range of wildlife. We have already lost far too many of these valuable resources and, in all, the United States has lost nearly 50 percent of its wetlands, and continues to lose about 60,000 acres of wetlands per year.

Having said that, I think it is very important to remember that the definition which is the subject of this legislation would not only be applied to which wetlands are protected, but it would impact all of our water bodies, because the Clean Water Act also looks at what can be discharged from a pipe into the river that becomes our drinking water, what can be discharged into the streams and the tributaries that then flow into our rivers.

And so when we think about this legislation, we can't simply think about the wetlands that sort of brought this bill front and center, but we should think about the entirety of our commitment as a country to protect our water resources.

For three decades, 35 years following the Clean Water Act's passage, agencies and courts have agreed on what waters are protected. We can go back and forth on what this or that word meant, but when you look at the day-to-day interpretation and the application of that understanding, there has been widespread agreement.

Obviously, with these recent Supreme Court decisions, there are some ambiguities. As a former regulator, I believe very strongly that the Congress should clarify and resolve these ambiguities. What will happen is in the permitting process, either in the wetlands permitting process or in the discharge permitting process, these ambiguities will lead to delays, they will lead to litigation.

If Congress can make the decision to embrace the interpretation that has withstood the test of time, we can resolve the ambiguities that have risen up because of the decisions. In the most recent Supreme Court case, the Rapanos case, I was joined by three former Administrators in filing an amicus brief supporting the 35-year interpretation of the definition. It is also, I think, very important for the Committee to note that we shared the same position in that litigation as the current administration shared before the Court.

Let me close by encouraging you to move as quickly as possible. These ambiguities are a real problem for the regulators. And let me also close by noting that before I joined the Environmental Protection Agency under President Clinton, I served as a State Secretary of the Environment. I served as the Secretary of the Environment for my home State of Florida. We ran a very, very serious wetlands protection program in Florida. Wetlands are essential to our economy in Florida. Even with as serious a program as we had in Florida, we could not have done the job of protecting our citizens' water resources without a Federal program. It takes both a Federal and a State program.

Again, I thank you for the opportunity to be here, and I look forward to answering any questions.

Ms. JOHNSON OF TEXAS. Thank you very much for being here.

Congressman Baker.

Mr. BAKER. Thank you, Madam Chair.

Ms. Browner, in order to understand more fully your view of scale or scope of the subject at hand, you make reference in the written testimony to the hydrologic cycle of water. Can you give me just a brief description in your mind of what that hydrologic cycle narrative would look like? Is it groundwater which flows into a wetlands which flows into the oceans, or is it broader than that? What constitutes your picture of that cycle?

Ms. BROWNER. Well, I would actually probably explain it slightly in the reverse of what you said, but along those lines. There are any number of parts of the country where a wetland essentially is filtering water. It may be rainwater, it may be water that has come from a tributary, it may be floodwaters that are filtering those waters as they seep down into the groundwater. That, in my mind, is a hydrological connection.

Mr. BAKER. So it is surface water through the geologic structure that winds up in some sort of discharge ultimately to an ocean. I am trying to get your big picture.

Ms. BROWNER. Not necessarily to an ocean. A good example would be in Florida. The State of Florida is dependent upon an underground aquifer for its drinking water. And so that doesn't have a connection to the ocean—at least none that scientists have discovered yet, maybe someday they will. But you want to protect that drinking water source. And the best way to do it is to think about what is happening in the recharge areas above that underground aquifer, which may be a wetland, which may be a river. You know, the connections can happen in many ways.

Mr. BAKER. In the case of the Baton Rouge aquifer, we have rainfall in Mississippi that does go through the sandstone to a depth of about 12,000 feet. The trouble is we do have oceanwater intervention coming from the gulf that is creating a wedge of saltwater intrusion, so I got it. My point is larger than that.

You look at water in the universal context, from pond inland to ocean international. That would include rainfall. That is a way to recharge the aquifers.

Ms. BROWNER. Correct.

Mr. BAKER. The scope of your jurisdictional reach is that if it is subject to any of those moving parts and there is a problem, the Clean Water Act protections should be invoked to cure that problem.

Ms. BROWNER. I believe that the interpretation that the EPA, the Corps, and the Congress relied on for 30-some years is the proper interpretation. I am not here advocating an expansion of those authorities.

Mr. BAKER. I understand.

Ms. BROWNER. Just preserve what we have been relying on.

Mr. BAKER. I understand. I am not suggesting you need an expansion. I think your definition is an expanded view. And I am merely trying to get a clear understanding of the moving parts of the water systems you think should be subject to the Clean Water Act. And I will move on, because we can't get resolution here.

Ms. BROWNER. With just a point of clarity, I am not suggesting to expand the definition. I am simply saying reaffirm the definition that has been relied on for 35 years.

Mr. BAKER. Well, I am standing on the definition that comes from the debate on the House and Senate floors from the 1972 amendment adoption in which the scope of argument was not beyond navigable waters, because there were navigable waters not then subject to the Clean Water Act. And the scope of the definition in that context was to make the act applicable to all navigable waterways, not bodies that were not adjacent to or abutted navigable waterways. And I can provide you that text.

But, secondly and more importantly, even in the Rapanos case, when you read the holding carefully, one of the principal elements in the finding that led to the conclusion that that wetlands were subject to Clean Water Act's jurisdiction was because one of the justices said you could literally go from ankle to waist-deep water directly into a navigable waterway. And it was because of the abutment of the wetlands to a navigable waterway that made jurisdiction attach.

But navigable waterway was the block on which all of this jurisdictional claim was built. That is the troubling aspect in the current debate. By removing the term "navigable" from "navigable waterway," we will now make waters of the United States literally any pond holding of water anywhere in the country, without the requirement of its ultimate relationship to a navigable waterway, as the principal regulatory component.

That is why I was pressing on the subject of hydrologic cycle, because I believe your definition of hydrologic cycle and jurisdictional reach of the CWA is much broader than that which abuts to a navigable waterway.

In any event, I asked the question about your view of the hydrologic cycle. If it were to rain, and that rain then becomes the recharge mechanism for the aquifer, shouldn't that area where the rain fell be subject to clean water concerns? And the reason why I bring that up is the Chairlady earlier had in the year a very educational and interesting hearing on atmospheric deposition of mercury. If we are worried about pollutants, and we are worried about water quality, and we are worried about getting it right, shouldn't be worried about mercury coming down in rainfall on a plain in west Oklahoma?

Ms. BROWNER. As you might be aware, I tried very hard to regulate mercury while I was at the EPA.

Mr. BAKER. I am fully aware.

Ms. BROWNER. And this administration has not chosen to continue those regulations. I do share your concern about mercury.

Mr. BAKER. And rainwater?

Ms. BROWNER. No. Again, I want to be very clear, I am not advocating an expansion of the jurisdiction of the Clean Water Act. If the rain falls in what is currently covered under the Clean Water Act, a wetland, then I think that wetland should be protected under the Clean Water Act. It doesn't mean someone can't get a permit and go through the process, or it doesn't mean where there are exclusions in the permitting process. They can't take advantage of those. But if that rainwater falls in an area that is currently protected under the Clean Water Act, I would hope that all of us would agree to continuing to protect that area so that rainwater which is polluted, as you noted, can be cleaned by nature as it seeps through the wetland into the recharge area.

Mr. BAKER. And this will be my final question, because I know my time has expired, but that presses the question a bit. And that is, if the wetland is not connected in some form or fashion, by tributary or other means, to the navigable waterway, in my view that is not a regulated wetlands.

However, when someone makes a tractor tire in an agricultural field, and it is filled with water—and I have cases that I will provide the Committee, 46—when the tractor tire filled with water it became a regulated wetland.

Secondly, construction projects under the Interstate between Baton Rouge and Lafayette, where there are isolated wetlands under the elevated expressway, those were maintained by law by the contractor during the course of construction as isolated wetlands.

If the bad rain we don't like falls on either of those two wetlands, your view would be that is subject to the Clean Water Act jurisdiction. You don't think it is?

Ms. BROWNER. If there is a connection to a water of the United States, it is covered. But you know, there are many ways those connections have to be demonstrated. And you know, it is obviously a scientific question. And there are experts in the field who do this. And it is quite possible—the hardest thing about this issue, and I fought this for the 20 years I have been involved in it, is that the least best indication of what is a wetland is water. We are far better off looking at what is the hydrology, what is the——

Mr. BAKER. Vegetation.

Ms. BROWNER. —vegetation.

Mr. BAKER. Porosity. I have spent a lot of time on it, and I have innumerable cases in my files which I intend to—and am in the process of providing to the Committee—where the hydrology, the porosity, vegetational quality, all of the elements that go into south Louisiana, where it is constructed of seven different Mississippi River deltas, most of which is beyond the Continental Shelf by depositional factor. We have 42,000 feet of squish. It is all put there by Mother Nature. It is not part of the Continental Shelf. But there is stuff that is there that does not constitute wetlands.

Ms. BROWNER. I don't doubt. I don't doubt.

Mr. BAKER. Well, the EPA does and so does the Corps, because people can't get permitted. I yield back.

Ms. JOHNSON OF TEXAS. Thank you very much. The Chair now recognizes Mr. Bishop.

Mr. BISHOP. Thank you, Madam Chair. Thank you for your testimony, and welcome back to Capitol Hill.

Ms. BROWNER. Thank you.

Mr. BISHOP. I just want to make sure that your position is well understood by all of us. The current law, the Clean Water Act, defines navigable waters as, quote, ″the waters of the United States.″ and then the Army Corps of Engineers has developed a set of definitions which in effect flesh out that rather broad statement, and the EPA has done the same. And what you are indicating to the Committee is that it is your position that you believe we should continue to honor those definitions.

Ms. BROWNER. Correct.

Mr. BISHOP. You are not advocating any expansion of those definitions?

Ms. BROWNER. No.

Mr. BISHOP. Thank you.

Now, the Rapanos case severely limits the definition of navigable waters, or defines navigable waters in a way that is much less expansive than current law. Can you walk us through the environmental implications if that becomes our guiding principle in terms of how we regulate waters?

Ms. BROWNER. Let me just say one quick thing about the Rapanos case. It is a very confusing case, because Justice Kennedy sort of moves back and forth, if you will. On the technical aspect of the decision, there are five of them agreeing. And then on the procedural aspect, Justice Kennedy joins with another four, and so the case gets sent back. So it is a confusing case.

The concern that I have with respect to Rapanos is that there are waters of the U.S. that are—that would have historically been protected may no longer be protected. It could depend in part on how the administration chose to read Rapanos.

The simplest thing to do is for Congress to clarify that those things which we have been protecting under the Clean Water Act for 30-some years we will continue to protect. The real day-to-day problem if we don't continue these protections is that we could see changes, not just in the wetlands program in terms of what is protected, but potentially changes in terms of which water bodies are protected from discharges, pollutants, that then get into our drinking water supplies and have to be cleaned up.

Mr. BISHOP. Okay. Thank you very much.

I have a bill that I am hoping that will get a fair hearing in this Congress called—I need a better title—but it is called the Raw Sewage Community Right to Know Act. And——

Ms. BROWNER. A good one.

Mr. BISHOP. If you can come up with a title, I would appreciate it. But that is—what we are hoping to do with that is create a standard for notification of the kind of discharges that right now take place without any form of national standard for what the notification requirements are.

Ms. BROWNER. I assume what you are talking about are combined sewer overflows.

Mr. BISHOP. That is indeed what I am talking about.

Ms. BROWNER. If I might, we worked with Congress to pass a national Safe Drinking Water Act during the Clinton administration. And one of the things that we were able to secure in that bill was a right-to-know program. So people now receive on an annual basis from their drinking water company a list of what pollutants were found, where they had exceedances. And you might want to take a look at that, because I think it has been a very successful public right to know.

Mr. BISHOP. Thank you very much. Madam Chair, I yield back. Thank you.

Ms. JOHNSON OF TEXAS. Thank you very much. Congressman Coble.

Mr. COBLE. Thank you, Madam Chair.

Ms. Browner, good to have you with us today. Ms. Browner, in the original drafting of the Clean Water Act, Congress carefully chose to divide regulatory authority between the Federal Government and the States, recognizing the vital interests that the States have in protecting their own waters.

Would H.R. 2421 undo this partnership, and therefore transfer virtually all regulatory authority over to the EPA and the Corps?

Ms. BROWNER. No. It does not change the partnership between the States and the Federal Government. It simply codifies the definition, if you will, that we have relied on for 32 years.

Mr. COBLE. Well, is this bill an appropriate reorganization of authority, considering the structure of the original Clean Water Act and the States' knowledge of their own water issues?

Ms. BROWNER. This bill doesn't change the relationship, if you will, between the Federal and State governments. I should have noted in my testimony 34 States also filed amicus briefs in the Rapanos litigation, taking the same position as the former Administrators, which is we wanted to preserve the level of protections. I think there is absolutely no State in the country that doesn't share a water body with at least, you know, one other State.

My home State of Florida, we share 18 different rivers with our neighbors to the north. And so you need a Federal program and you need a Federal-State partnership if you are going to be able to provide a level of protection. And nothing in this legislation would change that.

Mr. COBLE. Well, let me ask you this Ms. Browner. This may be a quasi-hypothetical question. In North Carolina we have a vast number of wetlands, particularly in the east, as well as river basins and tributaries that drain from the Appalachian and the Blue

Ridge Mountain range. Much of this runoff comes through the district I represent via the Yankton River Basin.

What is your comment—Strike that. Let me ask it a different way. I think you and I may not be in agreement, but we can disagree agreeably, however.

Ms. BROWNER. There you go.

Mr. COBLE. Let me ask you to comment about the effect of federalizing waters, if in fact that would be the case in the United States, particularly as it pertains to runoff from higher elevations.

Ms. BROWNER. I can't imagine why anyone would want to federalize runoff. I simply can't. You need the Federal and State government working together if you are going to deal with the ongoing issues of what we call surface water pollution. So the runoff as you are referring to frequently ends up in a river or a lake or a stream, a surface water. It may on occasion move through a wetland into the surface waters or through a wetland into a groundwater. But it requires both Federal and State actions to protect those surface waters and those groundwaters.

I don't know why you would have one or the other entity with exclusive responsibility. We have been very, very successful in this Federal-State partnership.

Mr. COBLE. Well, I thank you for that. I think much of this is very likely, Madam Chairman, subject to interpretation. I think some of us believe that this is going to probably be over-federalizing. Perhaps others think that perhaps will not be the case. So that is the beauty of a hearing such as this. We can probably get to the core of it.

Ms. BROWNER. Madam Chair, it might, just quickly to remind people of how the program works. EPA delegates the day-to-day operation of permitting to States. I can't speak to how many States have those delegations today. I can tell you when I was at EPA, we were very aggressive in turning over the operation of the permitting programs, both wetland permitting authorities and NPDES, or discharge permitting authorities.

You know, the idea of quote, "federalizing," one, I don't think it's a good idea. But let's say you went down that path; you would then have to provide the resources to EPA to handle all of those permitting programs that the States are currently handling. And I can't imagine anyone intends to do that.

And so I think the Clean Water Act, the Clean Air Act, a number of our Federal environmental laws have very wisely—Congress has very wisely said, EPA, you look at the big picture. But then when it comes to day-to-day operation, if the States have their State authority, if they have the resources, if they have the personnel and the expertise, let them do it.

Mr. COBLE. Thank you for that.

Madam Chairman, do you award credit for yielding back time before the red light illuminates? If so, I yield back.

Ms. JOHNSON OF TEXAS. Thank you very much, Congressman. The Chair recognizes Congressman Larsen.

Mr. LARSEN. Thank you, Madam Chair. Just a note for Mr. Bishop. It is a rare bill in Congress that actually describes what it does. That is why that title is a good one.

Ms. Browner, thanks for helping us out today. As I understand the Scalia reasoning versus the Kennedy reasoning on Rapanos, Scalia basically said there is a line to be drawn. Over this line is navigable water and then on the other side is nonnavigable. What Kennedy said is that there is some confusion about what is navigable or not, but there is a—he called it significant nexus test. Is that pretty accurate?

Ms. BROWNER. Correct.

Mr. LARSEN. What I didn't get from our staff memo was what are you saying Scalia used to determine, to draw that line?

Ms. BROWNER. Well, Scalia starts by looking to Webster's Dictionary for a definition of wetlands. I do not agree with that. I think Webster's definition is something that has water. And as I said previously, water may be the least—presence of water may be the least best indicator of whether or not something is a wetland. So you have to go to where his reasoning starts, and it gets you to this point where waters that are currently protected would no longer be protected.

You know, I think this is more logical than perhaps it can appear at first glance. I mean the waters—the fact that for 32 years everyone could agree on what was the scope and, you know, there weren't any real debates about that, is a pretty good test in my mind of a successful definition.

Mr. LARSEN. Let me just pronounce it the SWANCC decision.

Ms. BROWNER. SWANCC is how it is pronounced.

Mr. LARSEN. The SWANCC decision.

Ms. BROWNER. Sounded better than SWANCC.

Mr. LARSEN. At least in the staff memo we have, it discusses a footnote in which the majority, the 5-4 majority—well, actually Rehnquist opines that Congress must have intended that there be some nexus to actual navigation, but the majority referenced the legislative history, and noted Congress intended the phrase ″navigable waters″ to include at least some waters that would not be deemed navigable under the classical understanding of that term. That was a 2001 decision.

What then informed the Court in 2006?

Ms. BROWNER. I think the change in the makeup of the Court.

Mr. LARSEN. Okay. Perhaps I was getting there. So what did Scalia mean by intermittent or ephemeral waters? That is the waters that would be on the other side of the line that would not be included as navigable water?

Ms. BROWNER. I am not sure what he means. There are scientific definitions which I would be happy to have someone provide to you about what those terms mean.

Mr. LARSEN. I would appreciate that. And I would have the staff follow up on that question for me. I would appreciate it.

Ms. BROWNER. What is complicated in Rapanos, you have to remember, are what are the facts, which is there clearly was a connection in the most obvious sort of way at one point in time, and then a berm gets put.

Mr. LARSEN. In the actual case.

Ms. BROWNER. Yes, in the actual case. So this manmade structure comes along and suddenly we are going to have a different interpretation of what is protected because of a manmade structure? That is what I think is particularly troubling.

Mr. LARSEN. Uh-huh. So in moving forward perhaps on Mr. Oberstar's bill, the issue—I mean what is the issue facing us if we—what do we have to do if we are going to—if the majority of the Congress, regardless of how the majority is made up in Congress, is going to fix this to be responsive to the Supreme Court? Because essentially we have to do something that is responsive to the Supreme Court.

Ms. BROWNER. I think you could, obviously, do nothing. The problem is that with the SWANCC and the Rapanos decision there is an ambiguity. A lot of people can read that ambiguity—different people can read it different ways. And I think that clarifying that the original jurisdiction is what the Congress intends to be carried forward is the simplest thing to do. And that is essentially what Oberstar does. If you don't clarify that, I suspect there will be permitting delays and there will be litigation. So a clarification I think for those people who seek permits could be very valuable.

Mr. LARSEN. Just to restate what we believe the original intent of the CWA is? Of the Clean Water Act?

Ms. BROWNER. To protect the waters of the U.S.

Mr. LARSEN. Yeah.

Ms. BROWNER. I mean it is very clear.

Mr. LARSEN. All right. Thank you.

Ms. BROWNER. Thank you.

Mr. LARSEN. Thank you, Madam Chair.

Ms. JOHNSON OF TEXAS. Thank you very much. Congressman Brown of South Carolina.

Mr. BROWN. Thank you, Madam Chairwoman.

Ms. Browner, glad to have you here today. Let me see if I can get my questions together. Here I am. I apologize. You stated that H.R. 2421 defines "waters of the United States" and they are nearly identical to the definition promulgated in rules and used by the Corps and EPA for over 30 years.

However, when the text of the rule you mentioned is compared to the text of the bill, there is substantial differences in the wording, including major omissions and changes that would expand the scope of Federal jurisdiction under the Clean Water Act to all waters and all activities affecting those waters to the fullest extent under the Constitution. Neither current law nor the Corps' current regulations say that. Further, the bill's definition leaves an important exemption in the regulation for prior converted croplands and waste treatment systems.

If you would please explain how you can characterize the bill's definition as nearly identical to the definition promulgated in the Corps and EPA's rules.

Ms. BROWNER. Mr. Oberstar's bill simply picks up the definition that has been relied on by EPA and the Corps for the last 30 years, the regulations which EPA and the Corps have adopted pursuant to the Clean Water Act, and that definition will remain in effect. There is nothing in this legislation that changes those regulations. So when people talk about some of the exemptions that EPA and the Corps have seen fit to put forward over the years, there is nothing in this that changes those exemptions. This bill is not amending those sections that EPA and the Corps may have relied on in putting forth those exemptions.

Mr. BROWN. So I guess the bottom line is you feel like that this bill does not further encroach on undefined wetlands as we see them today.

Ms. BROWNER. I do not think it further encroaches. I don't know that I would use the word ″encroach,″ but——

Mr. BROWN. And all the exemptions that have been identified in the past will be continued; the farming practices and some of the other issues?

Ms. BROWNER. Correct. I should be clear, I don't get to speak for the current administration. That is probably obvious. And they may decide, if the bill passes, to read it and change some regulation. I will tell you if I were sitting at the EPA, I would look at this bill and I would say it is a recodification of what EPA has understood to be the definition for 32 years, and therefore the regulations would be maintained.

Mr. BROWN. Madam Chair, if I might just give one example. In my region in South Carolina along the coast, we have lots of isolated rice fields, I guess for better word, which means they are diked-in wetlands, but they don't have a traveling path to the navigable waters unless there are reasons to lower the levels within that confinement. How would this bill——

Ms. BROWNER. If they are not currently regulated, they would not be regulated. If they are currently regulated by Federal law, then whatever that permitting program is would continue. I don't know what the State law implications might be. I don't know what your State law is in terms of those areas.

Mr. BROWN. Okay. Thank you very much. Thank you, Madam Chair.

Ms. JOHNSON OF TEXAS. Thank you very much. The Chair now recognizes Congressman Baird.

Mr. BAIRD. Administrator, thanks for being here and for your many years of service to this country.

Ms. BROWNER. Thank you.

Mr. BAIRD. As we look at the challenge of trying to protect clean water for all the things that the Clean Water Act was meant to, when I hear from folks it is not just a matter of who has jurisdiction over what, which is really the focus of the bill we are kicking around today, but it is also the permitting process itself which can be lengthy, which can be idiosyncratic, which can sometimes be inconsistent with one agency telling an individual landowner or business to do one thing and another saying another.

So for me, I think there would be a great deal of less trepidation or concern about this particular language in this bill if the process at the permitting agencies were itself reformed.

Can you give us any insights from your experience, if you could wave the magic wand and improve the permitting process across all the various agencies that could be impacted by the regulatory process, what kind of things would you recommend?

Ms. BROWNER. Well, we are talking about two different permitting processes under the Clean Water Act. We are talking about 402, which is the NPDES program, and then we are talking about

404, which is managed by the Corps, and is the wetlands permitting.

I think a very important thing to do is to turn over the day-to-day operation of these permitting programs to State programs that have the resources and the qualifications to handle them. You know, the States—I come from State government originally. I think States will generally make a very, very suitable decision. You need to retain Federal oversight, because you do have these instances, as I mentioned earlier, where waters are shared.

You know, Florida shares rivers with Alabama and Georgia. And so you need some sort of Federal oversight.

Ms. BROWNER. But I do not know, as of today, how many of these permitting responsibilities have been delegated to individual States, but I think that that has certainly proven, in many instances, to be successful.

Secondly, I certainly think where there are well-recognized exemptions and practices, that will not require a permit. On that, we can all agree. We did a streamlining initiative when I was at the EPA, and we articulated a set of those. I do not know if those have been maintained. I presume they have.

Look, practices change in ways in which development can occur. Ways in which dredging and filling can occur also change, and so it is the responsibility of the Agency to sort of keep up with what are those changes and whether or not any of those practices might fit into—it is not really an exemption. There is a legal process that gets sort of created in a regulation, so you do not have to go through a permitting decision individually, but nevertheless, you know, those activities can be on a list and be respected as activities that the Agency thinks can be handled in a way that are protective of the Nation's waters.

Mr. BAIRD. Do you——

Ms. BROWNER. The other thing I would just say is, you know, throughout my tenure at the EPA, we heard from many Members of Congress of situations that appeared to be very, very troubling. You know, we always did our best to fully understand those situations, and there were situations where there were some troubling matters, but in the vast majority of them, what was going on was the Department, the Agency, the State thought that ″no″ was the right answer, that you had finally found a resource, and the kind of impacts that the permitter was seeking were just inappropriate under the law. The Agency is not free to act outside of the law—under the law. So, you know, as people talk about various stories, I think it is really important to have all of the facts.

Mr. BAIRD. I think that is true, and my guess would be that almost everybody in this body has had some calls from people who want us to intervene and try to move the Agency in one direction or another, and as you looked at the case, you thought they just got a ″no″ they did not like, but at the same time, my guess would also be that many of us have heard several horror stories of people who are trying to do fairly reasonable things.

We had a meeting on permit streamlining in my district, and one old-time guy, a farmer, got up, and he said, ″You know, sometimes I think agencies could never be on 'Who Wants to be a Millionaire' because they could never say, 'That is my final answer.'″

Ms. BROWNER. Well, I think the problem is agencies frequently say, ″It is my final answer,″ and no one wants to hear it as their final answer. “No” is not a word that many people like to hear.

Mr. BAIRD. The other question arises when you have got multiple agencies with multiple jurisdictions for multiple pieces of legislation, all of which have a piece of the pie.

Any quick comments before my time runs out on that? You have got EPA, NPDES, plus possibly State and local agencies.

Ms. BROWNER. Well, the State and local authorities stem from the Federal authority, so it is for the EPA to delegate and to oversee it. I think, certainly during my tenure, we did a pretty good job of working across agency lines. I mean it is not a clean water example, but with the passage of the Food Quality Safety Act, I mean there was a huge amount of cooperation that had to go on between the Department of Agriculture and the EPA, and it went on, you know, respectfully and fairly successfully.

You know, I cannot speak for this administration what level of cooperation is going on. There will be differences, but that is why you have a White House. That is why you have a President. You know, they ultimately get to decide between the two views that departments or agencies might take.

Mr. BAIRD. I appreciate the input.

I will just close by saying that I asked similar questions yesterday, and I think if we as a Committee address the issues of permit streamlining, efficiency and fairness, there will be a lot less concern about some of the other matters addressed in this legislation.

Thank you for your services.

Ms. JOHNSON. Thank you very much.

Congressman Westmoreland.

Mr. WESTMORELAND. Thank you, Madam Chair.

Ms. Browner, how long were you a public servant with the State and with the Federal Government?

Ms. BROWNER. In public office or—I also worked as a staffer.

Mr. WESTMORELAND. Just working.

Ms. BROWNER. Working for government? Gosh, more than 20 years. I have not added it all up. I was really young when I started.

Mr. WESTMORELAND. I understand. You still are.

Ms. BROWNER. No, I am not.

Mr. WESTMORELAND. Now you are a principal of the Albright Group?

Ms. BROWNER. Uh-huh.

Mr. WESTMORELAND. What do you all do? What does the Albright Group do?

Ms. BROWNER. At the end of the Clinton-Gore administration, Secretary Albright, myself and several others formed a consulting firm. We work with companies outside of the United States—American companies, mostly American companies—when they have problems outside of the United States.

I also serve on a number of nonprofit boards. I chair the National Audubon Board. I am a founding board member of the Center for American Progress. I just joined the League of Conservation Voters with your former colleague, Mr. Boehlert, and the list goes on.

Mr. WESTMORELAND. So your company mainly works out of the country?

Ms. BROWNER. Most of our representation—I am not a registered lobbyist. I do not lobby.

Mr. WESTMORELAND. Okay.

Ms. BROWNER. I do not have clients with matters—I might have clients who might have matters before the United States Congress, but I do not represent them. I leave that to my husband.

Mr. WESTMORELAND. But environmental issues, is that what the issues are that you are involved in?

Ms. BROWNER. No, not necessarily.

Mr. WESTMORELAND. A wide variety?

Ms. BROWNER. A wide variety.

Mr. WESTMORELAND. Okay. I want to ask you a question about the savings clause, if I could; and I am assuming you have read the bill and have read the savings clause.

Ms. BROWNER. Uh-huh.

Mr. WESTMORELAND. It has been suggested by supporters of the bill that the savings clause, section 6, should address the concerns of farmers, forest landowners and others who benefit from certain statutory exemptions enumerated in the clause. Given the limited scope of these exemptions, however, I fear that this legislation will sweep many of these agricultural and forestry activities into the scope of the Clean Water Act regulation simply because they are conducted in or are simply near some ditch, swell, gully or ephemeral stream that will now be deemed ″a water of the United States.″

Let me raise some specific examples, if you would consider them, and perhaps you can offer your views on how the savings clause benefits any of these activities.

It seems that the list of statutory exemptions in the savings clause is incomplete because it includes only agricultural return flows, but not the agricultural storm water discharges. Agricultural return flows are exempted from the clean water regulation by exclusion by the statutory definition of the ″point source″ and by an additional permit provision as provided in 4201.

Ms. BROWNER. 402.

Mr. WESTMORELAND. 402, that is right.

Agricultural storm water discharges, however, are exempt only by virtue of being excluded from the ″point source″ definition. Nevertheless, equally exempt, can you fathom any reason why the agricultural storm water discharges have not been listed as a specific exemption in the savings clause?

Ms. BROWNER. I think there are a couple of questions, so can I kind of go through them?

Mr. WESTMORELAND. Sure.

Ms. BROWNER. Your first question is—the gist of it is: Are the current exemptions in any way shape or form changed by this legislation? As I said previously, I do not believe so.

Then I think your second question is: Does the savings clause in some way or another preserve some exemptions, existing exemptions, and delete others?

Well, if that is your concern, get rid of the savings clause. You do not need, in my opinion, a savings clause, because the bill is very clear. It is amending one section; it is not amending the sections that the exemptions fall under, so those exemptions are retained.

I do not fully understand what the logic of the savings clause was, but I suspect it was an effort to speak to some concerns that had been raised, but I do not actually think you need a savings clause.

Mr. WESTMORELAND. So you think that it would not hurt to put the same exemptions that are in the Clean Water Act now into this bill?

Ms. BROWNER. Well, I am not sure that—I will have to say that I am not sure your premise is accurate. I am not sure there actually is an exemption for agricultural point source discharges from the 402 permitting process. I would suspect there is not, but I do not know for a fact.

Mr. WESTMORELAND. Okay. Let me ask you this: In the Corps——

Ms. BROWNER. I do not think under any scenario—the reason I am here supporting this is, it simply reaffirms what we have been doing for some years.

Mr. WESTMORELAND. So you do not have a problem with using the same language?

Ms. BROWNER. I have a problem if you change the exemptions. If you add a few more practices to the list of exemptions in this bill, I will oppose the bill.

Mr. WESTMORELAND. Okay, but even if we add——

Ms. BROWNER. That is probably what you want.

Mr. WESTMORELAND. Well, no. Even if they are the ones that are in the Clean Water Act now?

Ms. BROWNER. But I think you are asking me about one that might not be in the Clean Water Act now. We are moving back and forth.

Mr. WESTMORELAND. Let me rephrase my question. Let me rephrase my question.

If we put exactly what is in the Clean Water Act now in this bill as it relates to farming, ranching, mining—agricultural uses—you would be okay with it?

Ms. BROWNER. Any current exemption.

Mr. WESTMORELAND. I said, as to exactly what is in there now.

Ms. BROWNER. But you said ″exactly what is in there,″ and I said ″exemptions,″ and exemptions are found in the rules.

Mr. WESTMORELAND. Okay.

As to the Corps and the EPA definition of ″navigable waters,″ do you know why they never used the word ″navigable″?

Ms. BROWNER. I was not in office in 1972.

Mr. WESTMORELAND. I understand.

Ms. BROWNER. I do not know why.

Mr. WESTMORELAND. Did you ever question that, being the Administrator, why the bill said ″navigable waters″; yet, the Corps' and the EPA's regulations never mentioned the word ″navigable″ or anything about navigation or anything else?

Ms. BROWNER. Well, I think it is important to remember that the law says ″the waters of the U.S.″ and that the regulations were intended to put a fine point on exactly what was protected and how it would be protected. It is very common that an EPA regulation does not—because it is going down to another level of detail——

Mr. WESTMORELAND. I understand.

Ms. BROWNER. —it might not use a word.

Mr. WESTMORELAND. Excuse me. I understand, but since the term ″navigational waters″ was used in the bill 81 times and it talks about the navigational waters and the definition of the Corps and the EPA says the term or the definition for ″waters of the United States,″ are you saying those are interchangeable?

Ms. BROWNER. I am not sure I understand your question.

Mr. WESTMORELAND. ″navigable waters.″ what is the definition to you of a ″navigable water″?

Ms. BROWNER. It does not really matter what my definition of it is. It is what the Congress said and how that has been interpreted and how that has been supported over 35 years; and I think that is pretty clear.

If I might, Madam Chair, just add one point, I think the real test, and perhaps what we should all be looking at, is, has this law provided us with a program that has led us toward cleaner water in this country? That is not to suggest that the job is done and that all of our rivers, lakes and streams are pristine—they never will be. But we have certainly made real progress when it comes to cleaning up our surface waters, and that has been, in part, because we have a definition that has provided the agencies with the ability to regulate activities that impact those rivers, lakes and streams in a detrimental manner.

Ms. JOHNSON. Thank you very much.

I have a question or so.

Currently, under the Rapanos guidance, some point sources that may have been governed by the Clean Water Act at one time may no longer be required to get a 402 permit.

What are the likely implications to our efforts to protect water quality if the point sources are excluded?

Ms. BROWNER. Well, the most significant progress we have made in protecting our Nation's waters is through the point source program, without a doubt, through the 402 permitting program. If Rapanos is interpreted by the administration to change that program to limit the ability of the EPA in the States because the States use this authority to require reductions in point source or discharges from pipes, then we could see, and probably would see, an increase in pollution loadings in certain water bodies. It would be bad for water.

Ms. JOHNSON. Now, currently about, I guess, 30 States have State water pollution laws that are less protective, actually, than they would be under the Clean Water Act.

If no changes are made to the Clean Water Act under this Rapanos guidance, is it likely that all of our States will strengthen their laws to protect these waters that are no longer protected by the Clean Water Act?

Ms. BROWNER. I do not know that I would—I would be concerned that not all States would actually strengthen their State laws. So rather than having sort of this broad Federal level of protection, you would have varying degrees of protection; and what would then happen is a downstream State would, no doubt, turn around and sue the upstream State because their lower water quality standards were suddenly endangering the drinking water or the oyster beds or, you know, some other fishing activities.

I think that you want a strong Federal floor for protection of water because, you know, we are one country—we travel, we move around, our commerce moves around. If States want to choose to go further in protecting their rivers, lakes and streams, I believe they should be able to.

You know, the Florida Everglades is a very different place than some of your water resources in Texas, and therefore, Florida might want to have a tougher phosphorus standard than, perhaps, another State might want to have; but you still need this Federal infrastructure to ensure sort of a level playing field between the States.

Ms. JOHNSON. Thank you very much.

Congresswoman Drake.

Mrs. DRAKE. Thank you, Madam Chairman.

Thank you, Ms. Browner, for being here today.

I hate to keep asking the same question, and I have heard you say very clearly that this is not expanding, it is simply defining and that we are going to do what we did before. What has been confusing to me is that there are many people who think this language will encompass things that were previously never covered by the Clean Water Act, whether it is groundwater, whether it is roadside ditches or things of that nature. So it has been interesting hearing you and hearing, you know, what I have heard about it.

I am wondering if you think there could be different language suggested to make sure it is doing exactly what you say but different from how people are interpreting it.

We listened to the little exchange between you and Congressman Westmoreland where there was a lot of disagreement over what does that word actually mean, what exclusion and where is it? So I think that is part of what the public is dealing with and with what, I think, Congressman Baird just said, that the reason the public is so alarmed is because they do not feel the system is efficient, they do not feel the system is fair.

There are multiple agencies and people who do everything exactly like they think it should be done, and a year later, you have someone at the EPA come back, and all of a sudden, they are in court; and now they have been in court for years and years. So the public does not feel they have been treated fairly.

So while we are having this discussion, I am wondering—because what I am hearing and what you are saying are two different things. So is there a problem in this bill that needs to be clarified, maybe, with language that is much more specific?

Ms. BROWNER. I actually think this bill does exactly what Mr. Oberstar intends it to do, and I will be honest with you. To start adding a lot more language will only lead to confusion as opposed to resolving confusion. That is my opinion.

Mrs. DRAKE. Well, one of the questions about it is that the Clean Water Act does not use the term ″activities″; it uses ″discharges,″ but this bill, the way it is currently drafted, does reference the regulation of activities.

I mean, why is that? If it is just redefining, if it is the same thing, why wouldn't you use the same terminology that was used before?

Ms. BROWNER. I would be happy to look at the section. I do not know which section you are in.

Mrs. DRAKE. This is dealing with——

Ms. BROWNER. Do you know what page?

Mrs. DRAKE. Yes. I am not looking at the——

Ms. BROWNER. I will be happy to look at it after the fact.

Mrs. DRAKE. Yes. It deals with ″activities″ in the actual bill. So that is a question and a concern as to why it would be ″activities.″

Then my last question is: Will there be any increased workload either to the Army Corps of Engineers or to the EPA under the language of this bill?

Ms. BROWNER. I cannot speak to what the current administration will do.

I will tell you, if I were at the EPA, this would not increase our workload. In fact, it would probably decrease the workload because you would have a level of predictability.

The problem with Rapanos is, there is a level of uncertainty; and that is going to lead to more litigation, which obviously means more annoyance to the public, more delays to the public, but also more work for the Federal agency.

Mrs. DRAKE. Okay. Thank you.

Ms. BROWNER. Thank you.

Mrs. DRAKE. I yield back, Madam Chairman.

Ms. JOHNSON. Thank you very much.

Mr. McNerney.

Mr. MCNERNEY. Thank you, Madam Chairman.

Ms. Browner, I have heard significant feedback from constituent farms that the Oberstar bill will, in fact, negatively impact their day-to-day operations all the way to their saying, ″If this law gets passed, we are going to have to close our farms down.″

Now, I would like you to address that concern in a way that would make them comfortable. Specifically, do the savings clauses in section 6 offer them some sort of protection or are there other provisions that would help out?

Ms. BROWNER. All of the agricultural activities that are currently allowed under the Clean Water Act can continue; nothing in this changes. And whether those activities are being undertaken because there are exemptions in the regulations or because there have been interpretations of the underlying statute, nothing in this changes. The sections that the agricultural community relies on for their exemptions are not amended by this bill.

You know, obviously having run the EPA for 8 years and having run a large State agency prior to that and having worked on the Hill as a staffer, this debate about wetland protection has gone on for a really, really long time in this country; and it is probably going to go on for a really long time.

I want to be clear. This bill, Mr. Oberstar's bill, in my opinion, does not change the playing field. Everybody is going to be in just the same place as they were before in terms of what they can do, what is permissible and what needs a permit. Remember, there is always a permitting option that is available, but this is not changing. If you do not need a permit today, you are not going to need a permit after this passes.

Mr. MCNERNEY. Well, there must be some basis for their concern. Would you be able to address that or—I mean, they want an explanation.

Ms. BROWNER. Well, I think there are—and I do not want to speak to your particular constituents. I do not know them. I can simply tell you, from my experience, there are organizations that have for the last 15, 20 years gone about changing how our wetlands and how our surface waters are protected and have gone about minimizing the protections, and I think some of that effort is caught up in this discussion, but as I said before, for individual parties, what they are allowed to do and what they need a permit to do does not change.

Mr. MCNERNEY. Okay. Thank you, Madam Chairman.

Ms. JOHNSON. Thank you very much.

I think Congresswoman Drake had a clarification.

Mrs. DRAKE. I am sorry, Madam Chairman.

Ms. JOHNSON. Did you have a clarification?

Mrs. DRAKE. Yes, I did, and thank you very much.

If you would, look at section 4 on page 8 and on line 14 where it is defining waters of the United States, and on line 14, it says ″or activities affecting these waters.″

Ms. BROWNER. I have not found it yet. Hold on.

Mrs. DRAKE. Section 4. Page 8. Line 14.

Ms. BROWNER. Got it.

Mrs. DRAKE. The question was because, in the Clean Water Act, it used ″discharge,″ not ″activities.″ so that was another question of what does that actually mean?

Ms. BROWNER. I am happy to answer the question, but I need the current law in front of me. I need to understand what section you are referencing versus what section this is speaking to.

No doubt, the Clean Water Act uses the word ″discharge.″ this may not be amending the section that you are talking about. I cannot do this without all of the sections. I am happy to do it after the fact. If you want to send them to me, I will be happy to look at them, but the fact that the word ″discharge″ appears somewhere in the Clean Water Act and does not appear here——

Mrs. DRAKE. Well, I think the difference is ″activities″ does not appear in the Clean Water Act, and in this it does; and so it is like—is this expanding the current, where you are saying it is not redefining, but that it is simply clarifying the definition?

So, Madam Chairman, I think, if we could, let us submit that to her——

Ms. BROWNER. I would be happy to look at it for you.

Mrs. DRAKE. —and ask her to do that.

Thank you, Madam Chairman.

Ms. JOHNSON. Thank you.

Congresswoman Fallin.

Ms. FALLIN. Thank you, Madam Chair.

Thank you so much for being here today and for lending your expertise and tremendous background to this important topic. And I appreciate your comments about supporting cleaner water for the United States; I think we can all support that.

And I think we have made some progress on your statement about permitting in the States being best left done by the States, and your concern that you stated that you support States' being able to permit whenever possible and whenever they have the systems in place that need to be there; and then, also, your express concern about any unfunded Federal mandates and the lack of money that might come with that when it comes to——

Ms. BROWNER. Well, I actually did not say that, just to be clear. Really, I am not concerned about that.

Ms. FALLIN. Well, I am when it comes to——

Ms. BROWNER. But States charge for permits.

Ms. FALLIN. Right. Right. Well, passing down things to States and then States' not having the money to do what the Federal law requires——

Ms. BROWNER. But the States in the instance of the Clean Water Act ask for the permission. It is not just handed down to them. They seek it.

Ms. FALLIN. Right. Right.

What I wanted to ask you was—you said you support permitting whenever possible. It has proven to be successful, and I agree with that, too. But I have been contacted by some major groups in my States, some that have authority over water in Oklahoma—some of the farmers, the ranchers, the ag community—who have expressed concern about the change of language in this piece of legislation from striking ″navigable waters″ to ″waters of the United States.″

My industry leaders state that the EPA already has full jurisdictional rights, and they have been pretty much opposed to changing that language about the ″navigable waters″ to ″waters of the United States″ and believe that this would impose upon our States' rights. Some have said, in light of imposing upon the States' rights, that it could result in massive permitting delays on projects, that it could preempt State and local rights and that it also could cause some unfunded mandates.

So, in light of your general support that States have the right to do the permitting and of making sure that States have the resources to uphold the Federal law and the permitting itself, when we talk about the language in this bill encompassing water that has never previously been subject to the Clean Water Act by permitting requirements, including the groundwater, the roadside ditches, the waste treatment ponds, prior converted croplands, ditches, drains, pipes that convey wastewater to sewage treatment plants——

Ms. BROWNER. Can you refer me to the section of the bill that you are quoting——

Ms. FALLIN. Well, I am not quoting it. I am talking about——

Ms. BROWNER. —just so I can read it? It would be really helpful.

Ms. FALLIN. I will get that for you. I am talking about the general summary of the bill that I am looking at.

Ms. BROWNER. Oh, okay.

Ms. FALLIN. I am just talking about, conceptually, do you think it is necessary? To accomplish the goals of just having cleaner water and having a permitting process that works, could we just leave the language as ″navigable waters″ versus changing it to ″waters of the United States″ and accomplish the same goals?

Ms. BROWNER. Well, a couple of things if you do not mind.

I think a number of the activities you mentioned are not in the bill. I will go back and read it carefully, but I do not think they are in the bill, so I think we need to be careful about what is in the bill and what is not in the bill.

I support what is in the bill. I believe, after a careful reading of this bill, that it is a reaffirmation of how the Clean Water Act has been interpreted through the better part of three decades.

With respect to the States, I think if a State wants to take responsibility under the Federal law, as passed by Congress, to handle the permitting on a day-to-day basis, that is a good thing. Obviously, because they are exercising the Federal authority, not State authority, it is absolutely the responsibility of the EPA to ensure that that Federal authority granted by Congress to the EPA and now down to the State is handled accordingly.

It is not an unfunded mandate. Not all States have sought the authority; some States have and some have not. It is an individual State decision. When they seek the authority, they generally attach a permit fee so that they can cover some parts of the costs associated. I think more States have actually sought the discharge permitting authority, the section 402 authority, than the section 404 authority, but certainly some States have sought both of those.

Ms. FALLIN. I think the section I was asking about—and I do not have it in front of me right now, but the concerns I have had expressed, to me, are when you change the definition of the waters, that it could encompass those things that I mentioned before; and that is what I am hearing back from my community. Do you think it could?

Ms. BROWNER. I do not. I do not think this bill suddenly will have the EPA and the Army Corps of Engineers regulating activities to protect our Nation's waters that they have not previously regulated. And all I can tell you is that, you know, I have read it.

I have worked on the Hill for a number of years. I wrote a lot of laws; I got to interpret some of the laws I wrote as the Administrator of the EPA. You know, based on that experience—I am not a legislative scholar, but based on that real-world experience, I am very comfortable that this will not change the activities that EPA and the Corps have historically been engaged in.

I do not know what they are doing today.

Ms. FALLIN. Well, I appreciate your telling me that because I would like to go back home and tell my folks that you have told me in the hearing that it will not cover those kinds of things. I think it is important to know.

Ms. BROWNER. When you say "those kinds of things," what I am saying is things that are not currently—I do not know if those things are; I would have to go back and research each of them. Thank you.

Ms. FALLIN. Thank you.

Ms. JOHNSON. Thank you very much.

Congressman Carney.

Mr. CARNEY. Thank you, Madam Chair.

Ms. Browner, this horse is not quite dead yet. We have got one more beating on it here.

What would be the implications of actually leaving the phrase ″navigable waters″ in the bill?

Ms. BROWNER. Here is what I have to think about—and I will think about it, but let me tell you what I think has to be thought about.

I will have to go back and look at two Supreme Court decisions to understand the word ″navigable,″ but let us just use some common sense here, all right?

Mr. CARNEY. That would be great.

Ms. BROWNER. You know, for 35 years, as the EPA and the Corps were implementing this program either for wetland permitting—or let us not forget the discharges of pollutants. I mean, if we do not clarify things that could also be negatively affected—and we have done a really good job of getting that pollution that comes from point sources under control, and I think we want to stay there, and we want to continue to get even better about it.

But, you know, it is not like the EPA was sitting around or the Army Corps was sitting around with a map and saying, ″Well, a boat can fit on that, but a boat cannot fit on this, and therefore, we are not going to regulate this.″

They were saying, ″When we look at the waters of the U.S., when we look at our major rivers, we have to also think about the tributaries to those rivers and about the streams to those tributaries if we are going to actually protect that waterway.″ and I know we keep going around and around, but it seems so commonsensical to me that if you are going to protect something that is down here, and there are bad things going on up here, you had better protect and regulate what is going on up here; otherwise, you are not going to have a lot left down here. Sorry.

Mr. CARNEY. No. I appreciate common sense. It is a rare commodity around here. I am glad to have it.

I am kind of on the same tone, though.

Ms. BROWNER. You know, if you lived on a stream and you lived down at this end and somebody were doing something bad up here that was affecting your ability to swim down here, you would be really thankful that the EPA and the Army Corps of Engineers thought they should be able to regulate that thing up here.

Mr. CARNEY. I am grateful to them anyway. Thank you very much.

In your experience at the EPA, did you ever hear big influxes of complaints about the permitting process? I mean, were you getting feedback from the States that people were just up in arms?

Ms. BROWNER. We heard directly from the people. We did not have to wait for the States.

Of course. I mean, you run a permitting agency.

Mr. CARNEY. Right.

Ms. BROWNER. You know—I apologize if I said this while you were not here, but you know, a lot of times when you dug around, the problem was that the answer was ″no,″ and somebody did not like it but not all of the time.

I mean, look, the EPA has 18,000 people. You have got, you know, States of 1,000 people per agency or so. You can get some bad things going on, but a lot of times when you actually went digging, you found out that the real problem was that people did not like the answer.

Mr. CARNEY. Boy, that makes sense.

We have actually heard from other folks that Governor Schweitzer from Montana, for example, said that the folks actually liked the idea of a process where they knew what the process was; and the permits were there, and they had them in hand, and they could do what they wanted to do. I think that makes a lot of sense.

Of course, we hear the same complaints in our offices when we vote ″no,″ that we should have voted ″yes,″ and when we vote ″yes,″ that we should have voted ″no.″ so I get that.

Ms. BROWNER. There you go.

Mr. CARNEY. I just want to thank you for your testimony. In fact, you bring a breath of fresh air to this whole process, and I want to work with you and continue to keep the waters of this country clean.

Thank you very much.

Ms. JOHNSON. Thank you very much.

Mr. Duncan. Congressman Duncan.

Mr. DUNCAN. Thank you, Madam Chairwoman.

Ms. Browner, let me see if I can partially explain why there is so much concern on the part of farmers from California to Oklahoma and Virginia and people in Tennessee—not just farmers, but home builders to private landowners.

I am told that, you know, when the Clean Water Act was passed in 1972 and then for several years thereafter, there were a great many disputes about prior converted cropland, so much so—so many across the country—that a Farm Bill in the mid-1980s put an exclusion in there.

Now, this bill as it is presently written takes that exclusion back out, and potentially you are talking about thousands of farms and pieces of land that are going to be back covered again; and that uproar that occurred between 1972 and the mid-1980s is going to start back up again, and that is what is creating a lot of the concern.

Then, too, you have got this from—I have heard this decision pronounced different ways, the ″Rah-pan-ose″ or the ″Rap-ah-noes,″ whatever the pronunciation is. Mr. Rapanos moved a few dump truckloads of dirt a few hundred yards on a piece of property that he owned that was 54 acres. The decision says this was sometimes saturated soil. The nearest body of navigable water was 11 to 20 miles away.

Then you go on over here, and it says, ″The average applicant for an individual permit spends 788 days and $271,596 in completing the process, and the average applicant for nationwide permits spends even more days and money.″

Now then, it goes on down further, and it talks about the immense expansion of Federal regulation of land use that has occurred under the Clean Water Act, and it says, ″In the last three decades, the Corps and the Environmental Protection Agency have interpreted their jurisdiction over the waters of the United States to cover 270 million to 300 million acres of swampy lands in the U.S.″

Now——

Ms. BROWNER. I am sorry. Is that from the opinion?

Mr. DUNCAN. That is from the opinion.

Ms. BROWNER. Okay, from Scalia.

Mr. DUNCAN. That is from the opinion.

What people are concerned about—I mean, I read this morning that where they are having the British Open golf tournament, they have got soggy fairways. What a lot of people are concerned about is that they think now we are going to see this big expanse.

You see, when you make government so big and so bureaucratic, as we have done over these last many years, you go in and you require individual farmers to go through a permitting process that takes hundreds of days, on the average of 788 days, and $271,596, I mean you can wipe somebody out. And who you end up hurting in these deals is not the big, giant farmers or not the big, giant developers; who you hurt are the poor and those in the lower income and the working people and that small farmer and that small developer. That's who gets eaten up and chewed up and thrown out by all of this, and that is why you are seeing all of this concern about this already, even though we are just starting this process.

And yet, I get the impression that you do not really believe that people should be so concerned about this.

Ms. BROWNER. I think anytime there are abuses in a government, any government permitting program, that is cause for concern. I absolutely share that concern.

I did a lot of things while I was at the EPA to try and address problems that I thought were genuine, including, for example, in the Superfund Program where small businesses were being, I thought, needlessly drawn into the Superfund net. We created a whole program to protect small businesses from the Superfund liability. So I do not want to—where there are legitimate concerns, they absolutely need to be addressed.

With respect to the Rapanos situation, I do want to just remind everybody—I am sure you know, but it is just worth noting, once again, the Bush administration—the current Bush administration—took exactly the same position with the Supreme Court that I took, that Mr. Reilly took, that Mr. Train took, and that Mr. Costle took, all former EPA Administrators, so——

Mr. DUNCAN. The Bush administration sometimes makes mistakes. Let me ask you this.

Ms. BROWNER. I did not say that. I might have thought that.

Mr. DUNCAN. Do you have any suggestions as to what we could do to this law that you said you have read thoroughly; do you have any suggestions or recommendations that you could make so that we could do something with this permitting process that would not make it take an average of 788 days and $271,000 for small people or small landowners?

I mean, over 75 percent of the wetlands in this country are on private land.

Ms. BROWNER. I think, in the short term, the single most important thing you can do is pass this legislation to clarify the ambiguities that have been created by SWANCC and Rapanos, and that will help mitigate some of the permitting problems that are going to arise. There are going to be permitting problems because of

Rapanos; I strongly believe that. I think this is an important step to ensuring that those problems do not occur.

Mr. DUNCAN. Well, if we pass this law, would you find it acceptable to exclude small farm operations or small landowners who cannot possibly afford these types of court challenges?

Ms. BROWNER. This law is about protecting the Nation's waters. There will be times when small businesses and small farm owners have waters that need to be protected.

Now, having said that——

Mr. DUNCAN. You are protecting the big guys, not the little guys.

Ms. BROWNER. No.

Mr. DUNCAN. That is what it amounts to. You can say what you want to, but that is what it amounts to.

Ms. BROWNER. I will speak for myself, thank you very much. I am not on the side of the big guys versus the little guys. I am on the side of making sure that we honor our Nation's laws and do it in a fair and commonsense way.

The best way to do that, I believe, is to embrace this, to pass this. There are, no doubt, problems in the permitting system that will extend beyond the impact of Rapanos, and they can be addressed, but I do not think they need to be addressed in this law.

Mr. DUNCAN. Thank you.

Ms. JOHNSON. Thank you very much.

I was just looking at some of the Corps of Engineers' opinions, and they think that 80-some percent of the permits can be done in under 60 days——

Ms. BROWNER. Right.

Ms. JOHNSON. —and a total of 61 percent have been done in under 120 days, so it might be that efficiency set in somewhere.

Let me thank you so very much for being here today. It has been very helpful.

Ms. BROWNER. Thank you.

Ms. JOHNSON. We appreciate your spending your time.

Ms. BROWNER. Thank you.

Ms. JOHNSON. The second panel:

Mr. Steve Moyer is the Vice President of Government Affairs and Volunteer Operations for Trout Unlimited in Arlington, Virginia;

Mr. Joe Logan is the President of Ohio Farmers Union;

Mr. Marcus Hall is the Public Works Director and County Engineer in Duluth, Minnesota, for the St. Louis County Public Works Department;

Mr. Norman Semanko is the Executive Director and General Counsel of the Idaho Water Users Association, Inc. in Boise, Idaho, on behalf of the National Water Resources Association and the Family Farm Alliance; and

Mr. Larry Forester is a City Councilman of Signal Hill, California, on behalf of the Coalition for Practical Regulation;

Thank you very much for being here.

STATEMENTS OF STEVE MOYER, VICE PRESIDENT, GOVERNMENT AFFAIRS AND VOLUNTEER OPERATIONS, TROUT UNLIMITED; JOE LOGAN, PRESIDENT, OHIO FARMERS UNION; MARCUS J. HALL, P.E., PUBLIC WORKS DIRECTOR/COUNTY ENGINEER, ST. LOUIS COUNTY PUBLIC WORKS DEPARTMENT, DULUTH, MINNESOTA; NORMAN M. SEMANKO, EXECUTIVE DIRECTOR AND GENERAL COUNSEL, IDAHO WATER USERS ASSOCIATION, INC., ON BEHALF OF THE NATIONAL WATER RESOURCES ASSOCIATION AND THE FAMILY FARM ALLIANCE; THE HONORABLE LARRY FORESTER, CITY COUNCILMAN, SIGNAL HILL, CALIFORNIA

Ms. JOHNSON. Mr. Moyer, you may begin your testimony.

Mr. MOYER. Thank you, Madam Chairman. I really appreciate the opportunity to be here today and to participate in the hearing on this very important subject.

Because of the two recent Supreme Court decisions and the Federal Government's flawed guidance in interpreting those decisions, the status of the Nation's waters under the jurisdiction of the Clean Water Act is threatened, shrinking and confused. If we, as a nation, are ever to have any prospect of achieving the Clean Water Act's most laudable goal to restore and maintain the chemical, physical and biological integrity of the Nation's waters, the situation needs to be rectified soon.

T.U. supports the Clean Water Act and the Clean Water Restoration Act, H.R. 2421, as a critical step for restoring the historic scope of the act and the jurisdiction in placing the Nation back on track of achieving the goals of the act.

T.U. is the Nation's largest cold water fisheries conservation group. We are dedicated to protecting and restoring the Nation's trout and salmon resources and the watersheds that they depend on. We have about 150,000 sportsmen and -women who are devoted to restoring trout and salmon. They devote a lot of time and energy to restoring the waters in their home waters and the fisheries that are there. We are not constitutional lawyers, though.

T.U. staff and volunteers are not constitutional lawyers, but we think we know a good bit about restoring and maintaining the Nation's waters. We always view these waters from a watershed perspective. Water resources within a watershed are all connected from the top of the mountain down to the smallest headwater into the remotest wetland to the majestic rivers in the valleys to the coastal bays and to the oceans.

One of the most valuable lessons that we have learned is that watershed restoration is impossible without maintaining the health of headwater streams; and that is my main plea for you to consider here today, the health of headwater streams. Headwater streams, especially the intermittent and ephemeral streams that are dry for parts of the year, are the "Rodney Dangerfields" of the aquatic world. They do not get enough respect, but they really do deserve respect because the best science we have tells us how extremely valuable these headwater streams are. They really are the "roots" of all of our watersheds, and if we damage or kill the roots, we damage the trees, the large rivers that flow through the valleys and towns and cities.

The two Supreme Court decisions and the guidance that followed each have done a great deal of damage to put these headwaters at risk, and H.R. 2421 is the bill that is needed to be passed as soon as possible to fix this situation, and here is why. I have just a few points to highlight.

The two decisions have really narrowed and confused the extent of the act's jurisdiction; and the plurality in Rapanos' decision, in particular, was especially unfriendly to small headwater streams. Secondly, the EPA and the Corps responded to each of these decisions with guidance that went even further than the decisions themselves in curtailing the Clean Water Act jurisdiction.

In particular, on the Rapanos' guidance—on nonnavigable waters and wetlands, the Rapanos' guidance insists on a narrowly focused, case-by-case evaluation that promises to be both highly time-intensive and unnecessarily narrow. The waters that are most at risk from the Rapanos and SWANCC decisions are small headwater streams, as I mentioned, and other intermittently flowing streams and wetlands associated with such streams and geographically separated wetlands, like prairie potholes. Far from being isolated or remote, these waters are, in fact, the lifeblood of larger waters and some of the most vital waters to fish and to wildlife.

These resources are vast. These headwater streams comprise a very large portion of a lot of watersheds, especially in the western United States, and these waters are very valuable. They perform a whole variety of functions. Of course, the ones most useful to us are producing trout and salmon, but they also have great pollution controlling functions.

Also, then, you have to talk about activities. If you do not have geographic jurisdiction, then you do not have activity regulation; and we are very concerned about the loss of section 404 and, potentially, the jeopardy of section 402, the point source discharge programs, because of the loss of geographic jurisdiction. T.U. members use these programs to make sure that development is done wisely and does not pollute or destroy aquatic resources.

So, for those reasons, T.U. strongly supports H.R. 2421 and urges the Committee to pass it as soon as possible.

Thanks for having me today to testify.

Mr. MCNERNEY. [Presiding] Thank you, Mr. Moyer. Thank you for your testimony and for attending here this afternoon.

Mr. Logan, you are up next. Would you begin when you are ready.

Mr. LOGAN. Thank you very much, Mr. Chairman and Members of the Committee. I appreciate the opportunity to be here today to testify.

My name is Joe Logan. I am the President of the Ohio Farmers Union. I am a fifth-generation family farmer from northern Ohio, where I graze cattle, produce row crops. We make maple syrup, grow grapes, and produce wine. I am here today on behalf of the National Farmers Union, a general commodity farm organization that represents family farmers, ranchers, fishermen, and rural residents from across the country.

The NFU recognizes that the purpose of the Clean Water Act is to provide clean water—clean, safe, usable water—for all of the citizens of the United States. At the same time, the act reminds us that preserving clean water is a shared responsibility to be borne equally by all who use, benefit from and rely upon a healthy and safe supply of water. The NFU believes that family farmers and ranchers have historically been the best soil and water conservationists when given the economic incentives and the flexibility.

Two Supreme Court cases involving the Clean Water Act have resulted in considerable confusion among the Corps of Engineers, the EPA and those seeking to abide by the law. Bipartisan legislation introduced by the House and Senate is seeking to clarify that act. However, considerable confusion exists surrounding the intent of the proposed legislation, which I hope can be clarified here today.

Our members spend the vast majority of their time on their farming and ranching operations, day-to-day. They have not experienced a drastic difference between the pre- and post-SWANCC Supreme Court decisions. Some in the agricultural community have suggested that legislation introduced will expand the jurisdiction and scope of the original Clean Water Act and eliminate 32 years of regulatory precedent. It is my understanding that the legislation simply aims to clarify the responsibilities of the Corps of Engineers while, at the same time, it maintains the statutory and regulatory exemptions for agriculture; and I hope that the Chairman can clarify that intention to the agricultural community.

It is important to keep in mind that although agriculture sometimes contributes to water pollution, the damage is uneven in scope and in severity. The highest vulnerabilities occur most often where farming is done at an industrial level. Therefore, blanket regulations are unwise and very hard to justify to the producers. Any legislation impacting the Clean Water Act must be clear enough for those in the agricultural community to be able to predict which lands and which waters will be covered.

Farmers and ranchers have long acknowledged that clean, safe water is critical to the long-term success of their operations. What will help farmers and ranchers in the future is a less cumbersome and more expedient process when the agricultural community, the EPA and the Corps can come to a consensus about what problems do and do not need to be addressed and the most practicable way to address those challenges.

As National Farmers Union members have demonstrated for generations, farmers, ranchers and fishermen are effective environmental stewards. Their astute understanding of natural resources deserves to be recognized and rewarded.

With that, Mr. Chairman, I thank you again for the opportunity to testify. I would be happy to take any questions you might have. I thank the Members for their efforts in this regard.

Mr. MCNERNEY. Thank you for your testimony, Mr. Logan, and for working with family farms, which, I think, is an important part of our national heritage and, hopefully, our future, our Nation's future.

Mr. Marcus Hall, representing the St. Louis County Public Works Department.

We look forward to your testimony. You can begin when you are ready.

Mr. HALL. Thank you.

My name is Marcus Hall, and I am the Public Works Director with St. Louis County, Minnesota. I want to thank Chairman Oberstar and Ranking Member Mica and the Transportation and Infrastructure Committee for allowing me to testify today, and I hope to give you a glimpse of the national wetland issue from a county highway department perspective.

St. Louis County is located in northeastern Minnesota and is a very large county. It extends from the most westerly tip of Lake Superior and goes north to the Canadian border. It is the largest county east of the Mississippi River, covering over 7,000 square miles.

Between the rivers, lakes, marshes, and swamps, over 35 percent of our county is covered with wetlands. Covering this vast region is an extensive State and county transportation system. St. Louis County, itself, is responsible for over 3,000 miles of roadway, and we have an annual highway construction budget between $25 million and $30 million.

It typically takes 3 to 5 years to go from the conception of a highway construction project, through a public input phase, a preliminary design phase, an environmental permit phase, a final planned phase, the right-of-way acquisition and bidding phase just to get to a point where you can begin construction. During this whole time, our constituents are watching this process, and most of the time, they are shaking their heads, wondering why it is taking so long.

Now, Minnesota recognizes the importance of wetlands to both our natural environment and economics. We adopted the Comprehensive Wetland Conservation Act in 1991, and in many cases, our State and local regulations are more restrictive than the Army Corps and PCA regulations.

I believe that the recent Supreme Court decisions have thrown the Federal regulatory agencies into turmoil and both the EPA and the Army Corps of Engineers into a scramble on how to implement the new rulings. The latest Agency guidelines, dated June 5th of this year, are very complex. The typical 60-to-120-day permit process has now slowed to a crawl. What the guidelines do is take a one-step process, consisting of applying for a permit, and turn it into a two-step process—first, applying to review your project to see if it falls under their jurisdiction and then, two, applying for a permit.

Mr. HALL. Our current best estimate is that this will add anywhere from 4 to 6 months to the process, more than doubling the current process time. And in Northern States, this will mean a delay of our projects for a full construction season. With construction inflation running between 4 and 7 percent, this represents an annual cost of between $1- and $2 million in delays for St. Louis County each year. Please remember that in the State of Minnesota, the local and State regulations and requirements are more restrictive than the Corps, so this delay comes with no increase in environmental protection for us.

A typical St. Louis County reconstruction project is our County State Aid Highway 47 project. It is a 4.7-mile project that is scheduled for reconstruction in 2008. The current estimated value of the project is $4.5 million. And under the new guidelines, the two-step process, it is my understanding the Corps will have to perform a jurisdictional determination on each of the 36 separate individual wetland crossings that we have on that project. If this forces a delay in our project, it will cost St. Louis County between $200,000 and $300,000 for this one project.

With numerous projects like this in the area, the local Army Corps of Engineers field personnel are currently overwhelmed by the amount of field work and paperwork that they are required to perform. I believe that the long-term solution to this issue is legislative action that clearly defines which wetlands falls under the Corps' jurisdiction, and eliminating this current first step of the two-step process.

However, a short-term solution would be to allow the permittee to waive the analysis portion, and on an individual case-by-case basis concede the Corps' jurisdiction and move right to the permit phase. Needless to say, either solution is preferable to the guidelines, which are presently unworkable.

In summary, I want to point out the county engineers understand the importance of our environment, and understand that our society has placed a great value on our wetlands. However, they have also placed a great value on a good transportation system, and it is up to us to balance these values and come up with a system and process that produces a great transportation system without harming our environment in the process.

That concludes my oral statement, and I will be happy to answer any questions you may have. Thank you.

Mr. MCNERNEY. [presiding.] Well, thank you for that testimony and for the insight into the operations of your municipal system, and how the Clean Water Act and the—how important it is that the Clean Water Act be clear so that people can follow its rules.

The next witness is Norm Semanko of the Idaho Water Users Association. Thank you for coming, Norm, and you can begin your testimony when you are ready.

Mr. SEMANKO. Mr. Chairman, thank you very much. My name is Norm Semanko, and I am here representing the National Water Resources Association and the Family Farm Alliance. The Family Farm Alliance advocates for family farmers and ranchers in 17 Western states. The National Water Resources Association is a collection of State associations that together represent the agricultural and municipal water providers that take very seriously their role in providing safe and reliable water supplies to their consumers and their customers.

I would like to review with you three areas today in the brief time that we have.

Number one is the history and the intent, this definition question with regard to waters of the United States.

Second is the impacts this legislation, H.R. 2421, is likely to have on the Federal-State partnership that has existed over the last 35 years under the act.

And then, third, I would like to talk about the impacts on water delivery providers, on our members.

First, with regard to the definition of waters of the United States, trying to boil down what we heard here over the last hour and a half or so, there were three camps, three decisions really in the Rapanos decision.

Number one, there were the folks that were able to get four votes, headed by Justice Scalia, that took the view that waters of the United States are the traditionally navigable waters, the ones that you can find the definition of in a dictionary or that you can look on a map and see blue lines. That got four votes.

And then there were the folks represented by the prior panelist and other folks that advocated for an interpretation that all waters, interstate and intrastate, should all be covered by the Clean Water Act. The Federal Government should have jurisdiction over all of that. And if the State wants to have some jurisdiction, too, that is fine, but the Federal Government is always going to be there. That got four votes in the dissent.

The middle vote was, of course, Justice Kennedy, which is widely considered the controlling opinion. And what he decided and what he said is that in addition to the traditionally navigable waters, you also have those waters that have a significant nexus to those navigable waters, those waters that actually have a physical, chemical, biological impact on the water quality. That is the real goal of the Clean Water Act.

Now, the folks with Scalia and the folks with the dissent didn't agree with that. If the folks that were with Scalia did what the folks in the dissent did, you would have a bill before you today that, instead of saying ″navigable waters,″ said those waters that are navigable in fact. In other words, they would want to have the jurisdiction under the Clean Water Act just be those blue lines on a map or those things that are defined as ″waters″ in the dictionary.

That is not what happened. Instead what we have is the folks that lost on the dissenting side coming in with their argument as to what they believe waters of the United States should be, and that is the definition that is included in H.R. 2421. It represents a tremendous expansion, no matter what has been said here today, with regard to the definition of waters of the United States. By including the language that all interstate and intrastate waters to the fullest extent, that those waters or their activities are subject to the legislative powers of Congress under the Constitution, that includes all waters in the United States.

What does this do for the Federal-State relationship? Well, traditionally the States, under section 101(b) and 101(g) of the Clean Water Act and other Federal acts, have had a tremendously important role with regard to the waters in the United States. Whether they were under Federal control or not wasn't important. The States had control over their water. That would be upset.

When you increase Federal jurisdiction, you are reducing, necessarily, the State jurisdiction. It is not enough to say that the States are delegated this responsibility by the Federal Government; that in essence they are given, if it's not paid for, an unfunded Federal mandate. It drastically upsets the delicate balance between the States and the Federal Government.

Then, third, the impact on our water delivery folks. There is no doubt with regard to section 303 if you are a waters of the United States, then water quality standards apply. If you are not meeting the water quality standards, cleanup plans have to be developed. So all the canals, and the drains, and the laterals, and the stock ponds—and the list can go on and on—they will all need to have TMDL plans developed. And the focus on the traditional waters of the United States that we have done such a good job of cleaning up will be lost.

Under section 402, NPDES permits will be required in places they haven't been. Section 404, permits will be required for routine maintenance activities, and things that are done in canals and laterals now.

Most importantly, the view of what the Clean Water Act will mean, what that jurisdiction means, isn't up to Carol Browner or to me or any of you. Any citizen can, with the cost of a stamp and a typewriter, put together a citizen lawsuit and file a lawsuit. Eighty percent of the enforcement actions under the Clean Water Act are brought by citizens, and they are able to convince a judge what the Clean Water Act means. And that is where you will have the encroachment and these vast interpretations under the act.

I appreciate your time, and look forward to answering questions. Thank you.

Mr. MCNERNEY. Thank you, Mr. Semanko. That was very enlightening and precise testimony. Thank you very much.

The next witness is Larry Forester from Signal Hill, California. And I look forward to your testimony. You can begin when you are ready.

Mr. FORESTER. I have a PowerPoint. I opened with the title The "Unintended and Foreseeable Consequences of Extending the Clean Water Act—the Southern California Experience." We are living it.

Honorable Chair and Members of the Committee, thank you for allowing me the opportunity to testify. Again, my name is Larry Forester, council member from the city of Signal Hill. Signal Hill is a member of the Coalition for Practical Regulation, 43 cities of the 88 in L.A. County working to improve water quality. CPR testified before this Committee in 2003. And we are pleased that you are taking a retrospective look at the Clean Water Act. I believe I am qualified. I have a degree in civil engineering, and master's degree in ocean engineering, and with 9 years of local elected experience. To explore unintended and foreseeable consequences to local government by extending the Clean Water Act is my duty.

CPR's testimony—let's see if I can work this—talks about what happened in Southern California, where we began to extend the Clean Water Act to public storm drains, isolated lakes, ponds, intermittent flood control channels. The problems in Southern California are now systemic, manifesting all Clean Water Act programs, from basin planning, NPDES permits, and Total Maximum Daily Load programs. Congress should see Southern California as a microcosm of the impractical, inflexible, unworkable, and costly approach which would be the result of expanding the Clean Water Act nationwide.

Although well-intentioned, proposed legislation like H.R. 2421 will have unintended and foreseeable consequences, requiring numeric Federal quality limits, including applying Federal toxic rules to local drains, gutters, ponds, reclaimed water, and drinking water reservoirs.

A major consequence of extending the Clean Water Act will be to expose thousands of local governments to legal actions taken by third parties, as authorized by the Clean Water Act. Southern California is now the watershed of litigation. The majority of the litigation can be traced back to the imposition of Clean Water Act standards by regulators to what are clearly nonnavigable waters.

My written testimony details examples of what I want to highlight. We will look at the San Diego permit. In 2001, the San Diego Regional Water Quality Board defined a municipal storm drain as waters of the United States. The entire storm drain system, starting at the curb, is regulated by the Clean Water Act. This permit has widely been copied by local regulators. The consequences are deeply troubling, since the Clean Water Act requires compliance at the point of discharge into the waters of the United States. This literally means compliance with the Clean Water Act at the driveway, house, or business.

Constructed wetlands. Regional engineers have found that constructive wetlands will capture many of the pollutants in urban runoff. However, engineers have found that water within the constructed wetlands may not be capable of meeting Federal water quality standards. Proposed expansion of the Clean Water Act could preclude the use of constructed wetlands, since they are part of the drain system.

Vertical box culverts. When I look at vertical box culverts, I am talking about channelized rivers. Engineers constructed hundreds of vertical, walled concrete-lined, box flood control channels in Southern California to deal with historic flooding beginning in the 1930's. With the adoption of the Clean Water Act in 1972, water quality standards have been attached to these culverts. Many were designated for swimming use, even though public access is restricted. These designations were made at a time when the regulators stated that the Federal standards were impractical to apply to urban runoff, and said local government had nothing to worry about.

However, regulatory personnel changed over time, and so did the reach of the Clean Water Act. Regulators began requiring these channels meet recreational standards, but local governments protested, and the U.S. EPA regulators replied that the Clean Water Act required a Federal permit to approve or to remove impractical uses. There is a 4-year process to remove swimming from the L.A. River. There are hundreds of similar channels.

Drinking water and reclaimed water. Many communities rely on above-ground storage of reclaimed water, for example, in small ponds and lakes. These ponds and lakes are isolated from rivers and oceans, yet many have designated habitat or other beneficial uses under the basin plan. The water quality objectives of these would require better water quality, a higher degree of treatment than for reclaimed water, absent these designations. Clearly, the application of the clean water standards to these reservoirs would require treatment with no tangible benefit.

A similar contradiction exists when applying beneficial uses to drinking water reservoirs, several of which are uncovered and open to the environment. Although public access is denied, most of these reservoirs have been designated for potential recreational uses. As a result, they are regulated for uses that are not compatible with their actual function as closed water distribution systems. The applicable Clean Water Act standards of these reservoirs would create some illogical treatment, and especially the applicability of the toxic rule.

In conclusion, our water board estimates the cost to local governments to comply with the metal TMDL of the Los Angeles River is $2.4 billion—″B″ as in boy—dollars. This is just one of hundreds of TMDLs that must be adopted on dozens of water bodies in the region.

Local governments in Southern California do not know how they are going to afford these regulations. Expanding the scope of the Clean Water Act will create a major Federal mandate. These examples are illustrative as you contemplate the scope of the Clean Water Act. Well-intentioned regulations can have unintended consequences. Many of these unintended consequences can be seen in advance. Hopefully, practical regulations and common sense can prevail.

Thank you for the time, and I am sorry I went over a little.

Mr. MCNERNEY. Thank you for that testimony. That does shed some light on the concerns that you are facing in the municipalities, a different set of concerns.

Unusual circumstances, so we are going to be called to a vote within the next 15 or 20 minutes. And it is expected to take an hour or so of voting, or maybe an hour and a half. So I am going to ask the panelists from the third panel, Mr. Yaich and Dr. Meyer to come forward and join the panel so that we will have the testimony before we start our questions and answers. And that way we can combine, and every one of the panelists will have an opportunity to speak this afternoon.

So I would like to ask Mr. Yaich from Ducks Unlimited, Memphis, Tennessee, to take the stand and address this body. And I look forward to your discussion. And you can begin when you are ready.

TESTIMONY OF DR. SCOTT C. YAICH, DIRECTOR OF CONSERVATION OPERATIONS, DUCKS UNLIMITED, INC., MEMPHIS, TENNESSEE; AND DR. JUDITH L. MEYER, DISTINGUISHED RESEARCH PROFESSOR OF ECOLOGY EMERITUS, UNIVERSITY OF GEORGIA, ATHENS, GEORGIA

Mr. YAICH. Mr. Chairman, Members of the Committee, my name is Dr. Scott Yaich, and I am the Director of Conservation Operations at Ducks Unlimited's national headquarters. I appreciate the opportunity to speak today on behalf of Ducks Unlimited and our more than 1 million supporters, as well as Pheasants Forever, the Theodore Roosevelt Conservation Partnership, Wildlife Management Institute, and the Wildlife Society.

DU's mission is to conserve, restore and manage wetlands and associated habitats for North America's waterfowl and for the benefits they provide other wildlife and the people who enjoy and value them.

DU and our partners are science-based conservation organizations, so our perspectives on the Clean Water Act are grounded in wetland and water-related scientific disciplines, and I offer our comments today from that perspective.

To ensure that we begin with a common understanding, it is worthwhile to state that from a scientific perspective, a wetland is an area that has hydric soils, is subject to being flooded for a portion of the growing season, or at least saturated, and supports or is capable of supporting wetland vegetation.

Our written testimony provides much more detail, but I would like to emphasize five primary points this afternoon:

The first is that of the original 221 million acres of wetlands in the U.S., over half have been lost. This has significantly affected the ability of the remaining wetlands and other waters to fulfill Federal and public interests. For example, the capability of the Nation's wetlands to support international waterfowl populations has been much reduced. I spent 17 years working in Arkansas, much of it in the Cache and White River Basins, historically among the most important wintering waterfowl habitats in North America. Arkansas has lost more than 80 percent of these wetlands, and the number of waterfowl coming to the region now are consequently much lower than they once were.

My second point is that wetlands serve important ecological and societal functions, including providing habitat for waterfowl and other wildlife. Wetlands hold water and provide natural flood control during times of high rainfall, and subsequently slowly release it and help maintain base flows of streams and rivers. In Minnesota, for example, watersheds with higher percentages of wetlands and lakes have been shown to have lower levels of flooding. Wetlands recharge aquifers, such as the High Plains Aquifer, that provides water to eight States. Along the South Platte River in Colorado, geographically isolated wetlands provide water directly to the river via groundwater connections. The water from some wetlands takes 12 years or more to move from the wetlands to the river, but because of the certainty and predictability of these significant hydrologic nexuses, this water has real economic value that is being bought and sold as part of an interstate and Federal agreement.

The negative side of these ubiquitous kinds of connections between geographically isolated wetlands and flowing waters, however, is that the water can transport pollutants. For example, there are a number of Superfund sites in one county in Michigan from which compounds such as polychlorinated biphenyls and heavy metals have leached from an isolated wetland into aquifers, private drinking wells, and ultimately to the Clinton River.

A wealth of scientific studies and wetland systems across the country documents these hydrologic and ecologic linkages between wetlands and other waters. These studies support my third point, which is that virtually all wetlands, in combination with similar wetlands in a region, do possess significant nexuses with navigable and other waters and have a direct effect on their quantity and quality. In the Rapanos decision, Justice Kennedy gave a strong indication of the importance he placed on consideration of the aggregate impacts of wetland loss when he stated an example of the public purposes that should be served by the Clean Water Act was to address water quality issues such as the Gulf of Mexico's hypoxic zone. This problem can only be addressed by approaching it at a landscape scale, a piece at a time, including protecting or restoring some of the 60 million acres of wetlands in the Mississippi River watershed, whose loss has contributed significantly to the growth of the problem in the first place.

The fourth point is that, as a result of the Supreme Court decisions and subsequent agency guidance being based upon something other than the best available wetland science, tens of millions of acres of wetlands across the country are now at significantly increased risk of being lost. Although Justice Kennedy's significant nexus test provides a science-based conceptual approach to wetland regulation, the nature of the nexuses between wetlands and navigable waters makes such a test virtually impossible to apply scientifically and efficiently within a regulatory context. We believe the effect will be decreased protection of wetlands and increased regulatory uncertainty, as well as increased administrative burdens and processing time required for permits.

So my final point is that due to the nature and almost universal scope of the connection between wetlands and other waters of the U.S., fulfillment of the primary purposes of the Clean Water Act, which is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters, requires that the wetlands protections that existed prior to the SWANCC decision be restored. Legislation that clarifies that central point is the only apparent remedy for restoring the necessary Clean Water Act protections.

Mr. Chairman, I thank you for the opportunity to present our views on this, and I will be happy to answer questions when the time comes.

Mr. MCNERNEY. Thank you, Mr. Yaich. I appreciate your testimony and your expertise.

And next we are going to turn to Dr. Judith Meyer. I look forward to your testimony, and you can start when you are ready.

Ms. MEYER. Thank you for inviting me to testify today, and for the opportunity to provide the Committee with the scientific evidence for the importance of headwater streams in maintaining the physical, chemical, and biological integrity of our Nation's waters.

My name is Judy Meyer, and I have been a professor at the University of Georgia, and conducted research on headwater streams for three decades. The scientific evidence is clear that small streams must be protected if we are to reach the goals of the Clean Water Act. Rivers are networks whose navigable portions are inextricably linked with headwaters, just as our own circulatory system is dependent on the functioning of healthy capillaries. Reaffirming a broad definition of waters in the text of the Clean Water Act is critical to the goal of the Clean Water Act, which is maintaining the physical, chemical, and biological integrity of our Nation's waters. Longstanding and robust scientific evidence demonstrates that interdependence of small streams and navigable rivers.

Today I am going to summarize four key points. But, recognize these points are supported by hundreds of peer-reviewed scientific publications. References to this extensive scientific literature are included in my testimony submitted for the record, and also have been more completely summarized in the document "Where Rivers Are Born." These points have also been made in a letter to Chairman Oberstar and Ranking Member Mica from the North American Benthological Society, which is a scientific society whose members study rivers and streams.

The first point on the critical importance of headwater streams is that they are ubiquitous. The smallest streams comprise the greatest number and length of channels in a river network. This is illustrated in this figure, which shows the percentage of stream miles in the smallest streams. The darkest colors are where small streams are over 59 percent of channel lengths, so that you can see in many parts of the U.S., well over half of the stream miles are in these smallest streams. Yet even this is an underestimate of the total length of small streams because of the scale of the maps.

For example, standard topographic maps with the blue lines that were referred to earlier identify only 21 percent of the stream channel length in a North Carolina watershed. In addition, a sizable fraction of the channel length in a river network is in streams that do not flow permanently. This is shown in this figure. In this case, darker colors indicate where over 80 percent of the stream length is in intermittent channels. In arid States such as Arizona, 96 percent of stream miles do not flow continuously. Intermittent streams are also abundant and significant in States that get more rainfall. For example, intermittent streams in Michigan comprise 48 percent of the length of streams in that State.

My second point: Headwater streams contribute to the physical integrity of the river network. Small streams are an important source of water for large rivers. Over half of the water in large rivers in the northeastern U.S. is delivered by headwater streams. Small streams hold and store water during storms and recharge groundwater. Where human activity has eliminated or degraded small streams, both the frequency and intensity of flooding increases downstream. In the face of global warming and increased threats of flooding, small streams will play an even more critical role in reducing flood damage.

Small streams also retain sediments. If the storage is reduced, sediments are flushed downstream during storms. This reduces water quality and negatively impacts fish feeding, spawning, and overall stream health.

Point number three. Tributaries are essential to the maintenance of the chemical integrity of navigable rivers. The basic chemical composition of unpolluted streams is largely established in their headwaters. For example, over 40 percent of the nitrogen that is found in navigable rivers in the northeastern U.S. originates in headwater streams. So therefore, pollutants and contaminants that are introduced into headwaters will make their way down to navigable waters.

Small streams in the network are also the sites of the most active uptake, transformation, and retention of nutrients. When headwaters streams are eliminated or degraded, more of the nutrients that are being applied to lawns and farm fields are delivered to downstream lakes and estuaries. Nuisance algal blooms, low oxygen concentrations, and fish kills are potential consequences of these excess nutrients.

My fourth and final point on the importance of headwaters is that they contribute to the biotic integrity of river networks. And they do this in three ways. They are the primary habitats of many aquatic and terrestrial species. My colleagues and I have found 290 taxa in tiny little streams in North Carolina.

Secondly, headwaters provide spawning habitat, serve as nursery areas, and offer a refuge from threats such as predators and stressful temperatures. Species may use small streams only part of the year, but it is essential that those streams are present and accessible when needed. For example, brook trout in the Ford River in Michigan retreat to cooler headwaters in summer. In coastal streams in Oregon, young coho——

Mr. MCNERNEY. We were called to a vote, so if you could wrap this up.

Ms. MEYER. I will. I am on my last point. Headwaters supply food resources to downstream and riparian ecosystems. Fishless headwater streams in Alaska export enough food to support hundreds of thousands young-of-the-year salmon in each mile of salmon-bearing streams.

So in conclusion, decades of scientific research have shown that permanent and intermittent headwater streams are an integral part of a river network. They are not isolated. They provide ecological goods and services. Whether they have a direct hydrologic connection to a navigable river, these headwater streams have a direct impact on the physical, chemical, and biotic integrity of navigable waters. They have traditionally been protected by the Clean Water Act.

Recent court decisions and agency guidance have not adequately incorporated scientific understanding that the entire river network requires protection. Legislation to reaffirm the original intent of the Clean Water Act is needed to reunite the law with the science. Thank you.

Mr. MCNERNEY. Thank you. That was very informative. Unfortunately, we had to cut that off.

Mr. Gilchrest has been very patient. I would like to give him an opportunity to ask a couple of quick questions, and then I will ask Members of the Committee to submit questions in writing to the panel, and ask that the panel respond to those questions within 2 weeks.

Mr. Gilchrest, would you like to begin?

Mr. GILCHREST. Thank you. I thank the Chairman.

I would like to ask three questions. And maybe since the panel is so large, and we have a vote pending, I could also get the response to these questions to the Committee.

First question is which waters of the United States should be clean? And keep in mind physical, chemical, biological factors.

Number two, how should we think about gravity and its relationship to water and the Clean Water Act, keeping in mind the nexus that Mr. Kennedy is talking about?

And number three, does it matter whether or not human activity regarding the hydrologic cycle of water, and understanding its necessary services to us human beings, is important? Does it matter whether or not human activity regarding the hydrologic cycle is important?

And I will yield back, Mr. Chairman. Thank you very much.

Mr. McNERNEY. Thank you, Mr. Gilchrest. I don't know how to characterize those somewhat philosophical—certainly the deepest questions we have had here today.

So I thank the panel very much for their expert testimony. It has been very interesting. As I mentioned in my questions of the first panel, a lot of my constituents are concerned about the impact of the Oberstar bill. So this has been helpful.

Hopefully you will get some questions from the Committee, and you will be able to answer those within a 2-week period. At this point I would like to adjourn this hearing.

[Whereupon, at 4:30 p.m., the Committee was adjourned.]

Committee on Transportation and Infrastructure

Hearing on "Status of the Nation's Waters, including Wetlands, Under Jurisdiction of the Federal Water Pollution Control Act"
Thursday, July 19, 2007

Statement – Congressman Jason Altmire (PA-04)

Thank you, Chairman Oberstar, for holding the second of two hearings to examine the status of the nation's waters under jurisdiction of the Federal Water Pollution Control Act, commonly known as the Clean Water Act. Tuesday's hearing provided us with some perspective on this critical issue and I look forward to the opportunity to hear from today's witnesses. In the interest of time, I thank the Chairman again for his attention to this issue and yield back the balance of my time.

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STATEMENT
OF THE HON. RICHARD BAKER
Committee on Transportation and Infrastructure

Hearing on the
"Status of the Nation's Waters, including Wetlands, under the Jurisdiction of the Federal Water Pollution Control Act"

July 19, 2007

- Today, the Committee meets for a second hearing on wetlands issues under the Clean Water Act.

- There is concern by some, including Chairman Oberstar, that recent Supreme Court decisions have weakened the Clean Water Act to a point that it no longer can protect the Nation's waters. Others have applauded those same Supreme Court decisions as an appropriate step toward reasonable and Constitutional Federal regulation.

- What we ultimately need is legislation that clearly delineates the Federal role and the state role in regulating activities affecting the Nation's waters.

- The Governor of Montana told us at Tuesday's hearing that his state did not want the "long arm of the Federal government" imposing regulations that would threaten the livelihoods of farmers, ranchers, and miners. He asked that the Federal government be a "partner and collaborator" with the state in a joint effort to protect water resources.

- Clarity is needed in the regulatory program. The legal scholars at Tuesday's hearing agreed on that point, but did not agree on whether the Chairman's bill would actually achieve that clarity.

- In its current form, the bill would not just adopt the current definition of "waters of the United States" in the Corps' regulations, as some have asserted, but would expand the scope of Federal jurisdiction under the Clean Water Act to all waters, and all activities affecting those waters, to the fullest extent under the Constitution. Neither current law nor the Corps' current regulations say that.

- It is unknown exactly what those maximum limits of Federal authority are under the Clean Water Act. Neither Congress nor the Courts have defined them. This uncertainty is a matter for much speculation and much future litigation.

- This uncertainty has led to some silly-sounding, but perhaps accurate, interpretations-- that "bird baths," "ornamental ponds," and even "the proverbial kitchen sink"-- could become Federally regulated waters.

- It would appear that state water protection programs, like that in Montana, would be subsumed by an expanded Federal program, so that the decisions currently made by local officials would instead be made by Federal bureaucrats.

- On Tuesday, we heard from Members on both sides of the isle that excessive regulation can have a serious adverse impact on the well-being of our citizens.

- While the historical perspective of the Clean Water Act is interesting, we must decide under today's circumstances, what is appropriate Federal regulation of the Nation's waters.

- We all want the same thing – clean water – and I pledge to work with you, Mr. Chairman, in producing a good bill. I look forward to working with you.

STATEMENT OF
THE HONORABLE JERRY F. COSTELLO
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
HEARING ON THE STATUS OF THE NATION'S WATERS, INCLIDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT
THURSDAY, JULY 19, 2007

Thank you, Mr. Chairman for holding this follow up hearing on the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act.

Over the last 30 years, the Clean Water Act has enabled major improvements in the health of our nation's waters, protecting them from pollution and destruction. As was event from our Committee hearing on Tuesday, our current situation where regulatory agencies are redefining jurisdiction demonstrates much confusion amongst stakeholders. That is why we must seek a compromise that clarifies this issue while not eroding the health and safety of our water system and improving people's water quality.

My constituents continue to have concerns and as I stated Tuesday, I am committed to working with Chairman Oberstar and other members as well as affected stakeholders for the protection and restoration of our nation's wetlands and waterways.

With that, I welcome the witnesses here today, and look forward to their testimony.

MAZIE K. HIRONO
2ND DISTRICT, HAWAI'I

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Statement of the Honorable Mazie K. Hirono
Before the Committee on Transportation and Infrastructure
Federal Water Pollution Control Act Amendments
July 19, 2007

Mr. Chairman, one of the greatest treasures that my State of Hawaii possesses is its natural beauty. The islands' spectacular waterfalls, pools, rivers, beaches and deep blue seas attract both residents and visitors alike who enjoy the beautiful views and swim and play in its waters all year around.

It is no surprise that I am deeply committed to preserve and protect this invaluable and measureless asset and I commend Chairman Oberstar for his leadership in strengthening the Clean Water Act.

Prior to the enactment of the original landmark environmental law in 1972, our Nation's seashores, lakes, rivers, waterways, wetlands and tributaries were ineffectively protected from polluters. The Federal Water Pollution Control Act Amendments finally addressed the real problem in preserving our waters by requiring a national permitting system that brought effective contol over previously unregulated discharges of pollution into our waterways.

However, as a result of Supreme Court and Appellate Court decisions, the ability of the Environmental Protection Agency and the Corps of Engineers was gradually restricted by confusing and counterproductive limitations on the regulators' jurisdiction.

HR 2421 will restore the intent and the strength of the original law that Congress passed over thirty years ago which successfully protected our waterways and wetlands. As a co-sponsor of the bill, I support defining which bodies of water are included in the term "waters of the United States." By striking the definition "navigable waters of the United States" and replacing it with "waters of the United States", the bill clarifies the intent of Congress and leaves no doubt--or room--for any Court to restrict its coverage by interpreting Congress' intent in a limited or confusing way.

I am also aware of the legitimate concerns of landowners, governments and other entities which stand to be included in the clarified definition. Restoring the original intent of the 1972 Clean Water Act will require greater EPA and Corps of Engineer's permit review and enforcement resources. We must provide adequate funding to assure that the law will be faithfully and efficiently enforced with minimum economic impact on landowners, businesses and governments affected. Only when the regulated and the regulators are working hand-in-hand and for the greater, worthy purposes of the Clean Water Act will this renewed effort to protect our precious Nation's waters succeed.

I commend Chairman Oberstar and Water Resources and Environment Chairman Johnson for their leadership. This legislation promises to be a historic landmark in environmental protection. I am pleased to be a part of this effort.

Doris O. Matsui

Statement by Doris O. Matsui
Subcommittee on Water Resources and Environment
Hearing on
"Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act"
2:00 p.m.
Thursday, July 19, 2007

Thank you Chairman Oberstar for calling this very important hearing.

The Clean Water Act has been the subject of quite a bit of legislative speculation recently----as well as legal interpretation over the years.

One thing I believe everyone can agree on is that the permitting process is not equally administered everywhere and in some districts it is broken and it needs to be fixed.

What those fixes are and how they are made are issues that all of us will have to work through. What is clear is that we need to start somewhere in addressing the immediate and long term water quality issues facing our country and our communities.

My District is Sacramento, California, located at the confluence of two rivers, the Sacramento and American. As my colleagues have heard me say before we are the most at risk river city for catastrophic flooding in the country.

Doris O. Matsui

The Sacramento region and the Sacramento River watershed as a whole is undergoing dynamic changes. We are experiencing a huge population growth.

We expect almost 2 million more people in the Sacramento region alone in the next 40 years.

As we grow, we need to make sure the tools, whether they be policy or regulatory, are in place so that communities like Sacramento can address this type of growth and ensure that the overall health of our watershed and its communities---remains in tact.

Today's hearing is a good first step in sharing perspectives, concerns and experiences in this complex area.

I look forward to working with the Chairman on these permitting and other issues as we move forward.

I look forward to hearing from today's witnesses. Thank you Chairman Oberstar.

Harry E. Mitchell

Statement of Rep. Harry Mitchell
House Transportation and Infrastructure Committee
Subcommittee on Water Resources and Environment
7/19/07

--Thank you Madam Chairwoman.

--Today is the second of our hearings on the status of the nation's waters, including wetlands, that are under the jurisdiction of the Federal Water Pollution Control Act.

--To say water is important to Arizona is an understatement. With such a limited supply, our state's livelihood literally depends on our ability to reliably control it, as well as keep it clean.

--In that regard, the Clean Water Act has been an invaluable tool.

--Nationwide, it has helped us make impressive and critical progress towards improving the quality of our nation's water.

--Recent Supreme Court decisions, however, have caused confusion as to the scope of the Clean Water Act.

--In deciding how to resolve this confusion, I want to encourage this committee to take into account the unique needs of arid regions like Arizona.

--I look forward to today's hearing.

--I yield back the balance of my time.

STATEMENT OF
THE HONORABLE JAMES L. OBERSTAR
DURING THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HEARING ON THE STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT"
JULY 19, 2007

Before I introduce our first witness, the Honorable Carol Browner, former-Administrator of the Environmental Protection Agency, I would note to my colleagues that the Committee had extended an invitation to the former-Administrators of the Agency to come and testify on this important issue this afternoon.

Unfortunately, due to a variety of reasons and scheduling conflicts, only our esteemed colleague, Administrator Browner, was able to join us this afternoon.

However, I ask unanimous consent that the testimony of former-Administrators William Ruckelshaus, Russell Train, and William Riley, as well as former-Assistant Administrators for EPA's Office of Water, Bob Perciasepe and G. Tracey Meehan, be made part of the hearing record.

[Without objection]

Combined, the testimony of these four Administrators, and two Assistant Administrators span the nearly 35 years of implementation of the Clean Water Act, and represent both Republican and Democratic administrations charged with protecting the nation's waters.

I would like to read a few excerpts from the testimony for my colleagues to consider.

First, from William Ruckelshaus, former EPA administrator for both the Nixon and Reagan administrations.

> EPA supported a broad definition of "navigable waters" as "waters of the U.S." Like Congress, we recognized that the "chemical, physical, and biological integrity of the Nation's waters" could not be maintained and restored unless pollutants could be controlled at the source, before they enter traditionally navigable waters.

> To faithfully interpret the key jurisdictional term "navigable waters" that Congress had just broadly redefined as "waters of the United States," EPA proposed a regulatory definition of the term "waters of the United States" that included interstate and intrastate waters.
>
> Broad Clean Water Act jurisdiction is not only necessary to clean up the Nation's waters. It is necessary to ensure that the responsibility for maintaining and restoring clean water is shared equitably throughout the watershed and from state to state. In passing the Clean Water Act, Congress recognized that the state-by-state approach to water pollution control had failed, and that it was necessary to maintain a federal "floor" for water pollution control to ensure that discharges in one state do not jeopardize water quality in another.

Next, from Russell Train, former Chairman of the Council on Environmental Quality, and former EPA Administrator during the Ford administration.

> A fundamental element of the Clean Water Act is broad jurisdiction over water for pollution control purposes. It has been well established that water moves in interrelated and interdependent hydrologic cycles and it is therefore essential that pollutants be controlled at their source to prevent contamination of downstream waters. When focusing on controlling pollutants, navigable waters, portions of those waters, their tributaries, and wetlands – all must be included in the scope of protected waters.
>
> If we did not protect these streams, creeks, and wetlands, the course of abating pollution in this country would be much more difficult and more expensive because of the additional costs of technological fixes that would be necessary in the absence of what nature has provided...Simply put, we cannot protect and restore our nation's water resources without providing appropriate safeguards for the entire resource.
>
> Comprehensive jurisdiction is ... also important to avoid unfair competition. Unless federal jurisdiction is uniformly implemented for all waters, discharges located on non-navigable tributaries from larger rivers, lakes, and other water bodies would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors. Artificially limiting jurisdiction to only certain waters will create competitive disadvantages for certain dischargers.

Also, from William Riley, former EPA administrator during the first Bush administration, and participant in the creation of the national goal of "no net loss" of wetlands.

> EPA has worked closely with the states over the last 30 years to make steady progress in reducing water-borne contamination and restoring the commercial, recreational, and ecological health of our country's aquatic resources. This successful federal-state partnership and the long-settled administrative practices on which it is built should not be weakened by an excessively narrow interpretation of the [Clean Water Act].
>
> Since the Clean Water Act passed, U.S. Courts and regulatory agencies have consistently complied with Congress's intent by interpreting the term "navigable waters" to cover all interconnected waters, including non-navigable tributaries and their adjacent wetlands, as well as other waters with ecological, recreational, and commercial values, such as so-called "isolated wetlands and closed-basin watersheds common in the western United States. This interpretation of the statute's jurisdiction has ensured a robust state-federal partnership.
>
> The key phrase at issue – "waters of the United States" – applies to all the water pollution control programs established in the Clean Water Act, not just the wetlands permit program. Perhaps the most important implication of any change to the definition of "waters of the United States" is found by looking at the Act's basic prohibition against discharging pollutants into waters without a permit in the National Pollution Discharge Elimination System ("NPDES") program established by section 402 of the Act, and the Act's water quality requirements. By using a broad definition of "waters of the United States," Congress recognized the need to address pollution at its source, no matter what size water. In reality there are few isolated waters, in deed many are linked in their hydrology.
>
> Congress needs to step in to clarify its intent. It is reasonable and sensible to have a broad definition of "waters of the United States" for the purposes of the Clean Water Act. The goals of the Act require it....We need the commonsense approach that Congress intended in the Clean Water Act to protect our nation's waters broadly so that we can reduce discharges of pollutants and ultimately achieve the goals of the Act – making all waters swimmable, fishable, and safe for other uses.

And, finally, from G. Tracey Mehan, former Assistant Administrator for the Office of Water during the current Bush administration.

> Mandating navigability as a basis for jurisdiction is inconsistent with the Act's overall objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. It is an artifact of an earlier law, dating back to the 19th century, which was designed to avoid obstacles to waterborne commerce rather than to implement integrated watershed management of environmental protection.
>
> I believe that our unique approach to "environmental federalism" under the Clean Water Act, and a science-based watershed approach to protecting America's aquatic resources, merit congressional action to clarify an extremely confusing and Byzantine situation which now exists in our law and regulation.

I thank my colleagues, and our witness, for their indulgence, and now recognize the Honorable Carol Browner, former EPA administrator during the administration of President Clinton.

Ms. Browner, you may proceed.

Carol M. Browner
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TESTIMONY OF CAROL M. BROWNER BEFORE A HEARING OF THE U.S. HOUSE OF REPRESENTATIVES TRANSPORTATION AND INFRASTRUCTURE COMMITTEE

"THE STATUS OF THE NATION'S WATER, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT"

July 19, 2007

Thank you, Mr. Chairman and members of the Committee, for the opportunity to testify to you today about the status of our nation's wetlands.

I speak to you today as a former Administrator of the Environmental Protection Agency. There is no denying the importance of wetlands for our nation's public health, our economy, and our ecosystems: they protect and purify water, shield our homes and businesses from flooding, and provide valuable habitat to a wide range of wildlife.

We have already lost too many of these valuable resources. In all, the United States has lost nearly 50% of its wetlands, and continues to lose about 60,000 acres of wetlands per year.

During my time at EPA, I gave a high priority to wetlands protection. I recognized, as did the administrators who preceded me, that Congress intended for the Clean Water Act to cover all of our nation's interconnected water resources, including watersheds, tributaries, and wetlands. However, this intent has been challenged in recent years by Supreme Court decisions such as *SWANCC v. United States,* and *Rapanos* and *Carabell v. United States.*

In the *Rapanos* case, I joined three of my fellow former EPA Administrators in supporting the government's interpretation of which waters should be protected under the Clean Water Act. In enacting this law, Congress acknowledged that ALL of our nation's waters are connected through hydrologic cycles and therefore must be given equal protection. Agencies and courts, in keeping with that legislative intent, must interpret the term "navigable waters" broadly as "waters of the United States," in order for our nation's waters to be adequately protected from pollution.

My fellow former Administrators and I jointly acknowledged that the reinterpretation of "navigable waters" taken by the petitioners in the *Rapanos* case would do serious damage to enforcement of the Clean Water Act and protection of not just tributaries and wetlands, but all of our nation's waters.

But in light of the Supreme Court' contentious split decision in *Rapanos*, there is now concern that wetlands and tributary protection is in serious jeopardy.

As the federal agencies responsible for implementing the Clean Water Act, EPA and the Army Corps of Engineers worked for months on policy guidance in light of the *Rapanos* decision. In June, after substantial review and revision by the White House and other agencies, in addition to concerted lobbying efforts on the part of developers and polluters, EPA and the Corps finally issued this guidance. Sadly, the guidance fails to clarify the Clean Water Act's protections for a large proportion of the nation's wetlands and streams. Under the new guidance, as many as 20 million acres of the nation's wetlands and thousands of miles of seasonal streams will be vulnerable to pollution, filling, and destruction. And this will, of course, affect all of our nation's water resources.

I wholly support the Clean Water Restoration Act of 2007 because it leaves little doubt as to the scope of the Clean Water Act in protecting our nation's waters. Specifically, striking the phrase "navigable waters" from the Clean Water Act and giving a very broad definition to the term "waters of the United States" will restore the original intent Congress had for this law, and will ensure protection for ALL of our nation's waters from pollution.

Thank you for the opportunity to speak to you today. I would be pleased to answer any questions you may have.

CONGRESSIONAL STATEMENT OF MR. LARRY FORESTER

"THE UNINTENDED AND FORESEEABLE CONSEQUENCES OF EXTENDING THE SCOPE OF THE CLEAN WATER ACT – THE SOUTHERN CALIFORNIA EXPERIENCE"

By Larry Forester, City Councilman, City of Signal Hill, representing
The Coalition for Practical Regulation
2175 Cherry Avenue, Signal Hill, California, 90755 (562-989-7305)

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Subcommittee on Water Resource and the Environment

Thursday, July 19, 2007
2:00 p.m.
Committee Room 2167, Rayburn Building

I.

SUMMARY STATEMENT

On behalf of the City of Signal Hill, California, and the many other member cities of the Coalition for Practical Regulation (CPR), I am respectfully submitting this Congressional Statement for your consideration. CPR testified before Congress in 2003, expressing our concern over the unprecedented expansion "upsteam" of the scope of the Clean Water Act (CWA) in the Southern California region by regulators, treating flood control channels and public storm drains as "navigable waters of the United States" and designating them for fishable and swimming beneficial uses, resulting in an impractical, inflexible and unworkable approach, including assigning "numeric limits" to urban runoff. The resulting regulatory problems in the Southern California region are now systemic, manifesting in all CWA programs, from basin planning, to setting water quality standards, to NPDES Permits and to the Total Maximum Daily Load (TMDL) program.

Southern California should be seen as a microcosm of the impractical, inflexible, unworkable and costly approach of expanding the scope of the CWA to all waters of the United States. CPR requested Congressional relief in 2003, hoping that Congress could bring a degree of common sense to the regulatory excesses in Southern California, where regulators have improperly extended federal authority to a full range of waters, including intermittent flow, concrete lined channels. Unfortunately, Congress is now considering treating the entire country like Southern California by extending the CWA's reach to all waters of the United States in the proposed Clean Water Restoration Act (HR2421).

Although well intentioned to protect wetlands, the legislation will have unintended and foreseeable consequences, including extending the enforcement of federal "numeric water quality limits" far upstream and interfering in local land use decision making. The bill contains limited exemptions, but is silent on whether HR2421 would extend federal numeric limits and water quality standards to local drains, streets, curbs and gutters, creating a major federal unfunded mandate on local government. HR2421 is also silent on whether the federal government will now regulate ground water and reclaimed water, which are extensively regulated by the States. HR2421 would undo the balance in the CWA, where section 101(b) of the act preserves important decision on land use and water supply to the States.

One major unintended and foreseeable consequence of expanding the scope of the CWA will be exposing thousands of local governments nationwide to legal actions taken by third-parties, as authorized by the CWA, when local governments fail to achieve the current unworkable numeric limits and impractical beneficial uses assigned to local storm drains. The Los Angeles Region Water Quality Control Board (the L.A. Regional Board) is now placing numeric standards into the NPDES Permits for Ventura County and incorporating numeric limits from TMDLs into the NPDES Permits for Los Angeles County for enforcement purposes. These actions are exposing local governments to unnecessary third-party litigation, such as the potential forthcoming lawsuit, Santa Monica Baykeeper & NRDC v. the County of Los Angeles and the City of Malibu, which alleges that the County and the City are discharging contaminated storm water and urban runoff, thus causing exceedances of water quality standards and objectives, in violation of their MS4 permits.

At a minimum, Congress should consider referring the questions of the unintended consequences to a review by the National Academy of Sciences. The National Academy assisted Congress in understanding the scientific and implementation implications of the CWA, most recently in a review of the issues associated with the TMDL program. The Academy found that it is much easier to foresee and correct for the problems created by amending the CWA, than to blindly adopt legislation that would create decades of unintended consequences. If Congress decides to move forward on HR2421, Congress should consider granting additional exemptions, in order to preserve local land use control and authority of the State to establish water quality standards. Exemptions should be created for local drains and streets, treatment facilities, such as constructed wetlands, and for reclaimed and ground water. Exemptions should also be created for small entities, such as small communities under 50,000 in population, as required under the federal Regulatory Flexibility Act.

II.

DESCRIPTION OF INTEREST

I have served as Mayor and Councilman for the last 9 years and have a master degree in Ocean Engineering from Catholic University and a Bachelors Degree in Civil Engineering from the University of Notre Dame. In addition to my duties as councilman and mayor, I serve on the Steering Committee for CPR, which is a broad coalition for forty-three Southern California Cities formed to participate in the review and application of storm water regulations. CPR's goal is to ensure that storm water regulations for the Southern California region make common sense and are cost-effective, taking into consideration the interest of the regulators, the regulated community and the public welfare.

The City of Signal Hill and other CPR members have a significant interest in the potential amendments to the CWA. We are permittees regulated under the CWA, with permits issued by the L.A. Regional Board and reviewed by U.S. EPA. CPR cities have been plaintiffs in litigation challenging our MS4 National Pollution Discharge Elimination System (NPDES) Permit, in certain TMDLs issued by the L.A. Regional Board and U.S. EPA. We are currently challenging certain aspects of the local basin plan, including the failure of the L.A. Regional Board to consider the impact on city services, the local economy and housing in our region by extending numeric limits to urban runoff.

Water quality programs are court-regulated in our region, as U.S. EPA entered into a Consent Decree with various environmental groups, after these groups brought litigation under the CWA in 1999 to force the development of TMDLs. The Consent Decree was negotiated by U.S. EPA with little, if any, municipal government input and it dictates the terms of the TMDL program. This decree has resulted in poorly conceived TMDLs, additional controversies and litigation. The same scenario will unfold if the CWA is broadened to regulate all waters of the United States.

We believe that our regulatory agencies have incorrectly assumed that waters of the United States (the navigable waters) have no upstream boundaries, and can be pushed as far inland and upland as the agencies arbitrarily decide, including into public storm drains. The CPR cities clearly have interest in any expansion of the scope of the CWA.

III.

THE UNINTENDED AND FORESEEABLE CONSEQENCUES OF EXTENDING THE SCOPE OF THE CLEAN WATER ACT

A. Entire Public Storm Drain System Declared "Waters of the United States"

The San Diego Regional Water Quality Board in 2001 issued an MS4 permit for the public storm drains in that region. The definition of waters of the United States contained in that permit states that: "a Municipal Separate Storm Sewer System (MS4) is always considered a Waters of the United States." (Order No. 2001-01, Page D-8) The agency defines MS4s to include all "roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-make channels, or storm drains." Thus, under this agency's view, the entire municipal storm drain starting at the curb and gutter is regulated under the CWA.

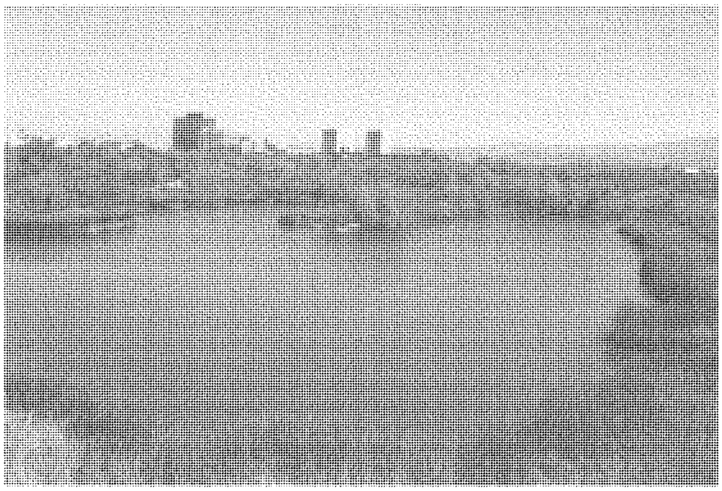
B. Classification Limits Treatment and Control Options

The ramifications of this approach are deeply troubling. Point source discharges to waters of the United States require NPDES permits. The permit requires compliance with water quality standards at the point of discharge or "end of pipe." Imagine the number of "point sources" that "discharge" to our urban and suburban streets. Are driveways and sidewalks point sources requiring a permit under this scheme? This permit approach has now been adopted by the L.A. Regional Board and has been hailed by environmental groups as a "national model." One of the first public controversies of the 2001 San Diego permit was concern over citations issued for car washing by church groups for a fund raiser. Perhaps more importantly, such an approach strongly restricts the options available to communities to improve storm water, as detailed below.

C. Constructed Wetlands/Regional Treatment Would Be Precluded

The practical result of labeling an MS4 system as waters of the United States is that the CWA's water quality standards will be *directly* applied to the municipal storm drains. If all the water in the public storm drain system must meet water quality standards, then the water will need to be treated *before* it enters the collection system. Such an approach would preclude the use of "regional treatment systems" to improve water quality, requiring water quality standards to be met at all points of the system, even those points where beneficial uses cannot and do not occur (e.g. requiring standards intended to protect recreational use to be met in enclosed, underground storm drains, where swimming cannot occur. One need only appreciate the fact that water enters the public storm drain at untold locations in a vast urban metropolis like Los Angeles to understand the impractical nature of this "micro" approach, and the danger of making it an enforceable norm by mandating it through the NPDES program. Because urban runoff comes from so many different and diverse sources, it is not possible to effectively and efficiently regulate these sources on an individual basis.

Alternatives being proposed by CPR and others include the construction of natural treatment wetlands at locations after runoff enters the public storm drain but *before* it enters true open and "navigable" waters, or where beneficial uses might actually occur. CPR cosponsored a feasibility study on the use of constructed wetlands in the L.A. area. (Brown & Caldwell, *Regional Solutions for Treating Stormwater in Los Angeles County: A Macrofeasbility Study*, April 2003) In the study, Brown & Caldwell, a nationally recognized environmental consulting firm, concluded that regional facilities such as constructed wetlands offer several advantages over site-specific controls. Constructed wetlands can support comprehensive watershed planning efforts in which conditions throughout the watershed can be addressed. Constructed wetlands can provide a community with multiple-use areas, such as green spaces, walking, biking and jogging areas, and ball fields. However, water *within* constructed treatment wetlands may not be able to meet federal water quality standards, and the proposed expansion of the CWA would preclude their use, as it would make the treatment facility a component of the MS4 system and "waters of the United States."

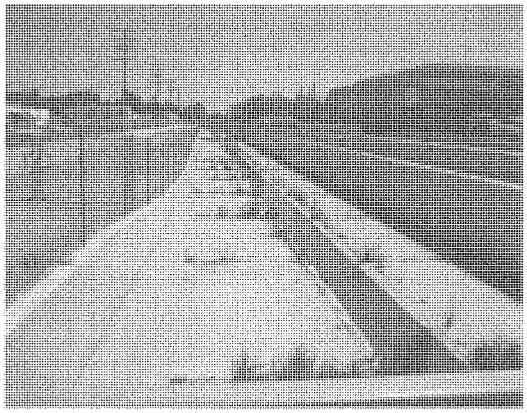


Constructed Wetlands – San Joaquin Marsh

D. Vertical-Walled Box Culvert Being Regulated As Waters Of The United States That Is Swimmable

The difficulties created by extending federal regulations to all waters is clearly seen in the Ballona Creek, a vertical, walled, concrete-lined box culvert, controlling flooding in a portion of Los Angeles. Water quality standards were developed for the Los Angeles area in 1978 for dozens of vertical-walled, concrete-lined, boxed culverts, designed for flood protection and restricted from public access. These flood control devices were assigned beneficial uses for swimming, for drinking water and for fishing, regardless of the existence of any region plans or funding to remove these culverts and return them to natural conditions. These designations were made at a time when regulators stated that federal standards could not practically apply to urban runoff.

During the 1990's, it became clear to municipal governments and the L.A. Regional Board staff, that U.S. EPA would not assist in undoing these original use designations, even if the originally uses clearly did not apply. The State and Regional Water Boards are required by the CWA to undertake a "structured scientific process" called a Use Attainability Analysis (UAA) even to remove uses that clearly do not apply. The difficulty in making any headway in correcting these inappropriately designated uses is found in the UAA process. The L.A. Regional Board voted on June 5, 2003 to maintain the swimming designation for a concrete-lined, boxed, access prohibited, flood control channel, in direct conflict with the recommendations of their staff and U.S. EPA.



Typical Vertical-Walled, Concrete-Lined, Boxed Flood Control Channel

The State Water Resources Control Board was able to provide some common sense, when they reversed the L.A. Regional Board on January 20, 2005. The change of beneficial use took four years and untold amounts of staff time and costs; in what was a clear case where federal water quality standards for swimming could not practically be applied. Congress should carefully consider the implications of extending the reach of the CWA to all waters of the United States in terms of the sheer number of UAA's that would be triggered by the application of federal standards to what are clearly not federal waters.

E. Extending the Toxics Rules To All Waters

California, like several states, has federally adopted water quality standard intended to protect aquatic life from toxicity. Known as the California Toxic Rule (the "CTR") limits, these standards were developed using idealized, laboratory conditions and not real world water and native species. There is a major scientific argument as to whether CTR standards, when established by U.S. EPA in 1999, where adopted as overly protective of aquatic life. In many cases local drinking water, although meeting all human health standards, exceeds CTR requirements, and studies in local waters indicate that the CTR limits for metals are overly protective (i.e. too low) by a factor of five or more.

The U.S. EPA has recognized that additional science would be beneficial and has adopted protocols for completing studies (know as Site Specific Objectives) to determine if the CTR standards can be adjusted for local water bodies regulated under the CWA. These water body studies are expensive. A recent cost estimate by the City of Los Angeles to study the CTR limits of copper, zinc, lead, selenium and cadmium on the Los Angeles River is estimated to cost the City over $2.3 million and will require three years of scientific research.

Extending the reach of the CWA act to all waters of the United States will have the unintended and foreseeable consequence of requiring additional Site Specific Objective studies for large number of waters not the current subject of federal regulation, with untold future expenses for local governments.

F. Economic Consequences Of Extending The CWA To All Waters – The Southern California Experience

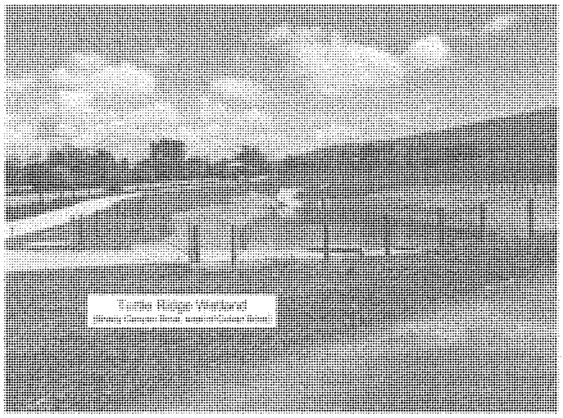
The costs of complying with federal water quality standards for all waters in the Los Angeles Region has been the subject of debate, since the release of a study by the University of Southern California in 2002 illustrating that regional treatment of storm water could costs upwards of $43.7 billion to control for the CTR on 70% of the average historic storm events. With the adoption of several TMDLs in the Los Angeles Region since 2002, the large costs of meeting federal standards in the Region are no longer being debated, as the Region contemplates additional tax measures to partially fund the new programs. Voters in the City of Los Angeles adopted Proposition "O" in 2005. The one-half billion tax measure is considered a "down payment" and a series of additional bond measures are being considered.

The L.A. Regional Board estimates that partial compliance with the Los Angeles River Metals TMDL will cost local government $2.4 billion; while the cost to local governments for compliance with a similar TMDL on the San Gabriel River is estimated at $2.6 billion. The cost of implementation of the Trash TMDL on the Los Angeles River is estimated by the Board to be $1.1 billion. These are three examples, where the Regional Board has dozens of water bodies and hundreds of TMDLs to complete in the Los Angeles Region in the next seven years. These CWA implementation costs are either passed on to the local taxpayers or absorbed by local governments by reducing or eliminating existing municipal services.

G. Application Of "Tributary Rule" To Upstream Curbs and Gutters

Another unintended consequence of broadening the definition of "Waters of United State" is exemplified in the 1994 L.A. Region Basin Plan ("Plan"). This Plan contains policy commonly referred to as the "tributary rule," which states that "those waters not specifically listed (generally smaller tributaries) are designated with the same beneficial uses as the stream, lakes, or reservoirs to which they are tributary." Most of the inland surface waters with the Los Angeles and Ventura Region are subject to several beneficial use designations. This rule, however, can be read to extend designated uses to virtually every water body's tributary system (i.e., extending the downstream uses to the upstream tributaries). Because pollutant concentrations may decrease as a result of dilution or via physical or chemical transformation, it is important to consider downstream impacts prior to applying downstream beneficial uses to tributaries. The L.A. Board's approach raises numerous questions about which tributaries are properly classified as "waters of the United State," including whether flows in gutters, or intermittent flows in rivulets in small canyons, should be subject to designations applied to perennial streams or lakes.

In its 2001 triennial review priority list, the L.A. Board acknowledges that "in the highly developed Los Angeles Region, many "tributaries" to a water body may be underground storm drains… (The regional also includes) numerous coastal streams, which are essentially tributaries to the ocean." This interpretation would require collection and treatment of storm flows, urban runoff, and other nonpoint sources on a very small, localized scale, a requirement that would likely be impractical and extremely costly, as detailed above. Thus, there is considerable uncertainty about where the waters of the United States begin, and how far upstream the "tributary rule" extends. Uncertainty regarding the definition of "waters of the United States" has created massive confusion in the Southern California. The proposed legislation would lead to confusion regarding not only the upstream application of the CWA, but the application to isolated waters as well.

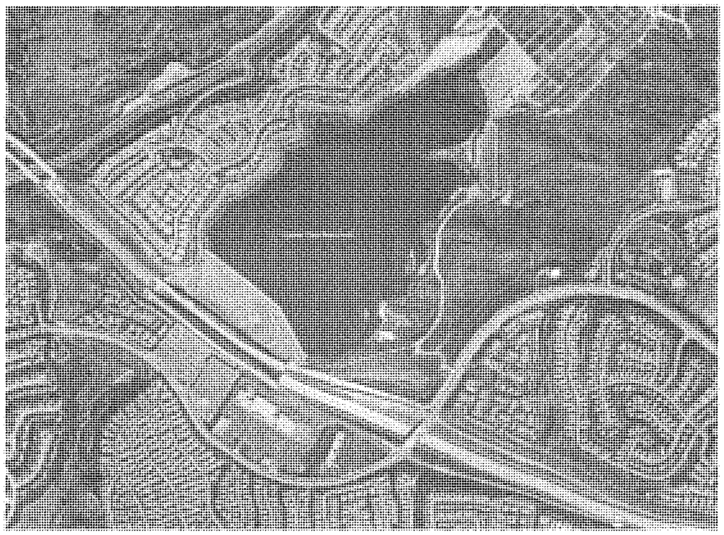


Shady Canyon Drive Drain

G. Application Of Standards To Drinking and Reclaimed Water Reservoirs

The water system in Southern California is a complex to above ground reservoirs and storage in natural aquifers. Many of our communities rely on surface storage of drinking and reclaimed waters in small ponds and lakes. There is an increased need to expand the uses for reclaimed water in the semi-arid climate of Southern California. These water bodies have been constructed explicitly for the storage of reclaimed water, but have been assigned designations for habitat and other beneficial uses. The water quality objectives for these beneficial uses often require a higher degree of treatment (i.e., "better" water quality) for the reclaimed water than would be required in the absence of the designations. As a result of classifying these waters as "waters of the United States," to protect the beneficial uses created solely be reclaimed water discharges and storage, reclaimed water producers would have to illogically cease making the very same discharges or treat to a level that may provide no tangible benefit to the environment.

A similar contradiction results from applying beneficial use designations to drinking water supply reservoirs, some of which are open to the environment (uncovered). Although public access to these reservoirs is prohibited, most have been designated for potential recreational uses by the L.A. Regional Board. As a result, they are regulated to protect potential uses that are not compatible with their actual functions and which will almost certainly never be allowed. Operators of the affected reservoirs have repeatedly stated in the record that these water bodies should not be regulated as "waters of the State" or as "waters of the United States," because they are part of a closed water distribution system and that recreational uses would result in the degradation of water quality.



Upper Oso Reclaimed Water Reservoir

CONCLUSION

These examples from Los Angeles, Orange and San Diego Counties are just several of the hundreds of examples that can be found in the Southern California of the problems of extending CWA standards, as has been the practice of local regulators the last several years.

Congress should carefully consider any legislation that would extend CWA jurisdiction to all waters of the United States. Cities in Southern California are struggling with unfunded mandates extending CWA standards to local storm drains, curbs and gutters. Expansion of the CWA would trigger these problems nationwide, for thousands of communities.

Even well intentioned regulations can have harmful unintended consequences. Many of these unintended consequences can be seen in advance, if Congress takes the opportunity to consult broadly with all stakeholders, including local government. Exemptions to the CWA should be considered, including for constructed wetlands and in waters treatment devices, reclaimed and drinking water reservoirs and local storm drain systems. The CWA, along with the NPDES Permits and the TMDL program are sufficient tools to improve the nation's water quality, without expanding federal regulations to an impractical level.

Congress should be concerned about the watershed of litigation underway in Southern California, over the expansion of the CWA to local storm drain systems, by regulatory agencies. Expansion to the scope of the CWA nationwide would set aside 35 years of jurisprudence, permits and policies, which has resulted in tangible improvements to the nation's water quality. The water quality in our nation's water bodies have been improving and local governments are committed to finding cost-effective measures to continue this improvement.

Congress should direct the National Academy of Sciences to report back on the effects of any proposed expansions to the scope of the CWA, prior to taking any legislative action. Congress should also request that the U.S. EPA survey local governments nationwide on the anticipated costs of expanding the scope of the CWA on local agency budgets. Hopefully practical regulations and common sense will prevail.

Committee on Transportation and Infrastructure

"Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act"

Marcus J. Hall, P.E.
Public Works Director/County Engineer

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My name is Marcus Hall and I am the Public Works Director/County Engineer for St. Louis County, Minnesota. I want to thank Chairman Oberstar and Ranking Member Mica and the Transportation and Infrastructure Committee for allowing me to testify today and I hope to give you a glimpse of the national wetland issues from a county highway department perspective. St. Louis County is located in the northeastern part of Minnesota and it is a very large county. It extends from the most westerly tip of Lake Superior and goes north to the Canadian border. It is the largest county east of the Mississippi River, covering over 7,000 square miles with a population of around 200,000. We have some urban areas, such as Duluth, Hibbing, and Virginia, Minnesota and we have pristine wildlife areas such as the Boundary Waters Canoe Wilderness Area. Between the rivers, lakes, marshes, and swamps, over 35 percent of our county is covered in wetlands. The major industries in the county include mining, wood and paper products, shipping, and tourism. Covering this vast region is an extensive state and county transportation system. St. Louis County itself is responsible for over 3,000 miles of roadway. We have an annual highway construction budget of between $25 and $30 million. I realize that for around here that is not a lot of money, but for most local units of government, counties and cities, that is a very large amount of money. It typically takes three to five years to go from the conception of a highway construction project through a public input phase, preliminary design phase, environmental permitting phase, final plans, and right-of-way acquisition to just get to the point when one can bid a project. During this whole time, our constituents are watching this process and most of the time shaking their heads on how long it takes.

Minnesota recognizes the importance of wetland to our natural environment and economy. We adopted the comprehensive Wetland Conservation Act in 1991. In many cases, our state and local regulations are more restrictive that the Army Corps or the PCA regulations.

I believe that the Rapanos and Carabell decisions (or non-decisions) have thrown the federal regulatory agencies into turmoil and both the EPA and Army Corps of Engineers into a scramble on how to implement the new rulings. The latest agency guidelines (dated June 5, 2007) are very complex. The typical 60 to 120 day permit process has now slowed to a crawl. What the guidelines do is take a one-step process consisting of applying for the permit and turn it into a two-step process consisting of (1) applying for a review of your project to see if it falls under their jurisdiction and then (2) applying for the permit.

Imagine asking a police officer to first determine if they have jurisdiction over each and every person before they takes action to enforce the law. Our current best estimate is that this will add anywhere from four to six months to the process, more than doubling the current process time. In northern states, this will mean a delay of our project for a full construction season. With construction inflation typically running between 4 percent and 7 percent, this represents an annual cost of between $1 and $2 million in delays for St. Louis County. Please remember that in the state of Minnesota the local and state requirements are more restrictive than the Corps so this delay comes with no or limited increase in environmental benefits.

A typical St. Louis County reconstruction project is our County State Aid Highway 47 project. It is a 4.7 mile project that is scheduled for reconstruction in 2008. The current estimate is $5.4 million. Under the new guidelines (the two-step process) it is my understanding that the Corps will have to perform a jurisdictional determination for each of 36 separate individual wetland crossings. With numerous projects like this in our area, the local Army Corps of Engineers field personnel are currently overwhelmed by the amount of field work and paperwork.

Even though state regulations are more restrictive, the permit process is much faster to work through because there are no jurisdictional determinations to go through. Actually the state process is completed in 60 to 90 days.

I believe that the long-term solution to the issue is legislative action that clearly defines which wetlands fall under the Corps jurisdiction, eliminating the current first step of the two-step process. However, a short-term solution would be to allow the permittee to waive the analysis portion and, on an individual case-by-case basis, concede the Corps jurisdiction and move right to the permit phase (legislative action maybe needed for this to take place). Needless to say, either solution is preferable to the current guidelines, which are presently unworkable.

In summary, I want to point out that county engineers understand the importance of our environment and understand that our society has placed great value on our wetlands. However, they have also placed a great value on a good transportation system and it is up to us to balance these values and to come up with a system and process that produces a great transportation system without harming our environment in the process. Thank you.

National Farmers Union

Testimony of Joe Logan

Before the
U.S. House of Representatives
Committee on Transportation and Infrastructure

Concerning the Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Thursday, July 19, 2007
Washington, D.C.

STATEMENT OF JOE LOGAN

PRESIDENT, OHIO FARMERS UNION

BEFORE THE U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

CONCERNING THE STATUS OF THE NATION'S WATER, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

JULY 19, 2007

Chairman Oberstar, Ranking Member Mica and members of the committee, thank you for the opportunity to testify today. My name is Joe Logan, and I am the president of the Ohio Farmers Union. I am a fifth generation family farmer from northern Ohio and have experience growing row crops, grazing cattle, and producing Maple syrup and wine grapes. Currently, I hold a seat on the National Farmers Union board of directors, where I serve as the chairman of the Budget and Audit Committee.

Today I am here on behalf of the National Farmers Union (NFU), our nationwide organization representing family farmers, ranchers, fishermen and rural residents. NFU is proud to be an organization whose policy positions actually come from producers. Polices are written at a local, regional, state and ultimately the national level. NFU recognizes that the purpose of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (Act), is to provide clean, safe and useable waters for citizens of the United States. At the same time, the Act reminds us that preserving clean water is a shared responsibility to be borne equally by all who use, benefit from and rely upon a healthy, safe supply of water.

National Farmers Union Policy in Regard to Water and the Environment

NFU's policy states that family farmers and ranchers have historically been our best soil and water conservationists when given the economic incentives and flexibility necessary to do so. Further investigation into our policy pertaining to water quantity distribution reveals that we support:

- The use of conservation as a primary tool for water development;
- Adoption of legislation to protect agricultural water rights through state water rights in order to prevent future power and energy plants from consuming water to the detriment of agriculture;
- Subjecting new large enterprises that will use a significant quantity of water to a permitting process that will assess the environmental and community impact of the proposed use; and

- Enforcement of the limitations on the size of farm operations eligible for federally subsidized irrigation water.

We oppose any efforts by the federal government through the usage of a national water policy to usurp the rights and prerogatives of individual states.

In regard to protecting water quality, the protection of our groundwater resources is critical not only to continuing farm operations, but as a source of drinking water for the vast majority of rural residents. Any legislation or regulations affecting groundwater should balance these interests in an effort to keep groundwater from becoming contaminated in the first place and to move quickly to clean up already contaminated sources of drinking water.

In constructing national policy to address the issues associated with water quality, we support the following actions:

- Efforts in research that address the issue of non-point source pollution;
- Concentrated Animal Feeding Operations (CAFOs) be required to post the appropriate bonds to cover the cost of cleaning up any contamination of ground and water resources. When posting these bonds, CAFOs should also be required to develop and submit waste storage closure plans;
- National minimum guidelines, or standards that give primacy for implementation and flexibility in regional planning to the states. A national policy should discourage polluters from "shopping" among the states for the lowest environmental standards and encourage states and localities to establish standards beyond the federal minimums;
- Cost-share provisions targeted to small and medium-sized farmers. Responsibility for submitting a waste management plan and complying with the waste management provisions should be shared by the owner of the livestock and the operator of the facility;
- Increasing funding for the Environmental Quality Incentive Program (EQIP) which provides federal cost-share and technical assistance to enable farmers to comply with environmental requirements;
- Family farmers being appointed to serve as advisers to any federal agency when a national waste standard is developed; and
- Targeting water subsidies to family-sized farm operations to conserve water and taxpayer dollars.

Administering Clean Water Policy in the Agriculture Sector

The original intent of Congress when it enacted the Federal Water Pollution Control Act Amendments of 1972 was to restore and maintain the chemical, physical and biological integrity of the waters of the United States. Since 1992, governments at all levels have struggled to redesign environmental policy for the twenty-first century. The Environmental Protection Agency (EPA) has tried to re-invent environmental regulation though use of community-based environmental protection, collaborative decision making, pubic-private partnerships and enhanced flexibility in rulemaking and enforcement.

NFU believes that EPA policies should be administered uniformly throughout the nation. EPA should strive to stop the practice of targeting specific regions with stricter standards than applied in non-target regions. Failure to curb this practice will result in an exodus of sensitive industries, including family farming, thereby jeopardizing the economic viability of producers and other rural residents.

Current language grants EPA and the Army Corp of Engineers (Corp) authority to regulate only the "navigable" waterways of the United States. The ambiguity associated with the term "navigable" causes problems in regard to how to accurately define the scope of jurisdiction for these regulatory agencies. By changing the wording of the Act to simply "waters," a national set of guidelines can be established for eligible waterways, creating uniformity in the jurisdiction process and expediting the subsequent permitting process. Additional time devoted to determining jurisdiction comes at great cost to both farmers and tax payers. Like many aspects of agricultural policy, a clear and concise method of determining jurisdiction and permitting encourages farmers and ranchers to be proactive stewards of water resources. Therefore, we urge lawmakers to clarify the Act and reduce the burdensome litigation and paperwork currently experienced by producers, regulators and the courts.

Changing the current wording to read "waters" of the United States restores us to the world before 2001. Supreme Court cases have done little or nothing but cause additional confusion and perpetuate a lack of consensus. Simply stated, we need legislative reform that addresses jurisdiction, not permitting. If questions or concerns regarding the permitting protocol exist, then we urge the committee to have that conversation with stakeholders in the future. Fear over changes in the permitting system should not interfere with passing legislation that clarifies the jurisdiction of EPA and the Corp.

Our members spend the vast majority of their time on their family farming and ranching operations. Day-to-day, these producers do not realize a drastic difference between the pre and post "SWANCC world." Restoring clean water practices to the methods used before 2001 would not cause unwarranted hardships on farmers, nor would it deliver them into a state of constant fear of EPA or Corps. Above all, agriculture producers are eager to highlight the unique set of circumstances that warrant attention when formulating clean water laws.

In an article written for the May-June National Wetlands Newsletter, Sen. Russ Feingold, D-Wis., discussed the implications of adopting a statutory definition of "waters of the United States" based on longstanding goals of protecting the nation's waters. He stressed that a reauthorized Act would not change the activities regulated by EPA or Corps. Current regulatory exemptions related to farming, forestry, ranching and infrastructure maintenance that have been in place since 1977 could not be overruled. Activities such as plowing, seeding, cultivating and harvesting, along with construction and maintenance of farm or stock ponds, irrigation ditches and farm or forest roads have been exempted from permitting requirements and would remain so under his proposed legislation. We encourage you to include the exhaustive list in further reauthorizations of the Act.

Moreover, NFU supports the following agriculture-related exemptions realized by our members:

- Discharges composed entirely of agricultural return flows;
- Discharges of dredged or fill materials from normal farming, silviculture and ranching activities;
- Discharges of dredged or fill materials for the purpose of maintenance of currently serviceable structures;
- Discharges of dredged or fill materials for the purpose of construction or maintenance of farm or stock ponds or irrigation ditches and maintenance of drainage ditches;
- Discharges of dredged or fill materials for the purpose of construction or maintenance of farm roads or forest roads or temporary roads for moving mining equipment;
- Discharges of dredged or fill materials from activities with respect to which a state has an approved program under section 208(b) (4) of such an Act.

Recognizing the Unique Characteristics of Agriculture in Water Policy

Many of our states have witnessed closures of major rivers to fishing or swimming after documented cases of illness from contact with water. In 1969, the Cuyahoga River in my home state of Ohio burst into flames, dramatizing the deplorable conditions that had come to characterize many of our nation's bodies of water. In the summer of 1997, Maryland Governor Parris Glendening was compelled to deny citizens access to two rivers in his state. Tests uncovered the presence of a toxic microbe that was thought to be caused by runoff of chicken manure that had been spread as fertilizer on farmers' fields. The acute case garnered national attention on a long-overlooked problem: how do agricultural operations contribute to the pollution of fresh water? Uproar from the state's poultry industry countered arguments by environmental groups and debate among farmers, ranchers, environmentalists and regulators over how to control pollution began. While a final policy is far from determined, as evident by this hearing, farmers and ranchers like myself and other NFU members endorse aggressive approaches to maintaining clean water supplies and taking responsibility for agriculture practices that contribute pollutants to fresh water.

It is important to keep in mind that although it is time to address agriculture's contribution to water pollution, the damage is uneven in scope and severity. It tends to occur where farming is done at industrial levels and fresh water resources are vulnerable. Therefore, blanket regulations are unwise and hard to justify to producers.

Determining the relationship between what runs off of a given parcel of land and how it affects water quality is complicated. How manure and fertilizer are spread and how land is tiered and tilled each contribute to unique circumstances on individual farming practices. Therefore, when crafting water policy careful consideration must be given to the agriculture sector and its distinct challenges in meeting guidelines and national mandates. Farmers should not suffer from flawed policies, just as our fresh water supply should not be jeopardized by lax standards and a backlog of regulatory discrepancies.

Conclusions

It is important to know what progress has been made toward the goals of the Act and whether the goals themselves provide a useful meaningful basis for federal water pollution-control policy. Any legislation impacting clean water must be clear enough for farmers and ranchers to be able to predict which lands and waters will be covered.

Farmers and ranchers should applaud efforts by Congress to clarify the intent of clean water legislation, ensuring that all waters of the United States remain valuable for drinking, fishing, swimming and a variety of other economically viable uses, many of which are put into practice on family farms and ranches around the country.

Farmers and ranchers have long acknowledged that clean, safe water is critical to the success of their agriculture operations. What will help farmers and ranchers in the future is a less cumbersome and more expedient process by which agriculture, EPA and the Corps can come to a consensus about what problems do or do not need to be addressed and the most practicable way by which challenges can be solved.

The ultimate challenge facing lawmakers is how to account for the differences between family farming operations and industrial agriculture. Family-sized producers should not be penalized, either through statue or financial burdens, for the irresponsible actions of massive corporate agriculture outfits who conduct business with little regard for environmental sustainability.

Interactions with our nation's natural resources do not need to set agricultural producers in opposition to the environment. As NFU members have demonstrated for many generations, farmers, ranchers and fishermen are our best environmental stewards and their astute understanding of the natural world deserves to be recognized and rewarded.

With that Mr. Chairman, I thank you again for the opportunity to testify. I would be pleased to take any questions and thank all of the members of the subcommittee for their support and work on these important issues.

19 July 2007

Statement of Judith L. Meyer, Ph.D
Distinguished Research Professor of Ecology Emeritus
University of Georgia, Athens GA

To the
United States House of Representatives
Committee on Transportation and Infrastructure

Hearing on
"Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act"

Mr. Chairman and Members of the Committee:

Good afternoon. My name is Judy Meyer, and I have been a professor at the University of Georgia and conducted research on headwater streams for three decades. I have received awards from scientific societies for this research and have served on local, state, and national scientific advisory bodies addressing water resources around the country. I appreciate having the opportunity today to provide this Committee with the scientific evidence for the importance of headwater streams in maintaining the physical, chemical and biological integrity of our Nation's waters.

The scientific evidence is clear that small streams and wetlands must be protected if we are to reach the goals of the Clean Water Act. Decades of scientific research have shown that the mighty river cannot be protected without also protecting the small stream. Rivers are networks whose navigable portions are inextricably linked to small headwaters just as our own circulatory system is dependent on the function of healthy capillaries. Reaffirming the broad definition of waters in the text of the Clean Water Act is critical to maintaining the physical, chemical and biological integrity of our Nation's waters.

Long-standing and robust scientific evidence demonstrates the interdependence of small streams and navigable rivers. Today I will summarize four key points that demonstrate these connections. These points are supported by hundreds of peer-reviewed scientific publications. References to some of this extensive scientific literature are being submitted for the record and have been more completely summarized in the document, *Where Rivers Are Born, The Scientific Imperative for Defending Small Streams and Wetlands* (http://www.americanrivers.org/whereriversareborn or http://www.sierraclub.org/WhereRiversAreBorn), which is also being submitted for the record. The importance of headwater streams in supporting biodiversity and ecosystem services was recently described in detail in series of technical papers in volume 43(1) of the *Journal of the American Water Resources Association* (http://www.blackwell-synergy.com/toc/jawr/43/1). These points have also been made in a letter to Chairman Oberstar and Ranking Member Mica from the North American Benthological Society, a scientific society whose members study rivers and streams. This letter has also been submitted for the record.

1. Small streams are ubiquitous. The smallest streams comprise the greatest number and length of channels in a river network. This is illustrated in Figure 1, which shows the percentage of stream miles in the smallest streams. In many parts of the U.S. well over half of stream miles are in these smallest streams.

Yet even this is probably an underestimate of the total length of small streams because of the scale of the maps used in the analysis. For example, standard topographic maps identify only 21% of the stream channel length in the watershed of the Chattooga River, North Carolina. And standard topographic maps are at a more detailed scale (1:24,000) than the data currently available on the National Hydrography Database (1:100,000), which is what was used to derive the information shown in Figures 1 and 2. Hence the information shown in those figures are an underestimate of the extent of headwater streams.

In addition, a sizable fraction of channel length in a river network is in headwater streams that do not flow permanently. This is shown in Figure 2. In arid states such as Arizona, 96% of stream miles do not flow continuously. Intermittent streams are also significant in states that receive more rainfall; for example, in Michigan intermittent streams comprise 48% of the length of stream channels in the state.

2. Permanent and intermittent headwater streams contribute to the physical integrity of the river network. Small streams are an important source of water for large rivers. Recent research has shown that over half of the water in large rivers in the northeastern U.S. is delivered by headwater streams.

Small streams and their associated wetlands hold and store water during storms making them critical for mitigating downstream flooding. When human activity eliminates or degrades small streams, both frequency and intensity of flooding increases downstream, and base flows are lower. In the face of global warming and increased threats of flooding in parts of the country, small streams will thus play an even more critical role in reducing flood damage.

Small streams are also important for retaining sediments. Soils eroded during storms are stored in small channels and released gradually downstream. If this storage is reduced, more sediments are transported downstream during storms; this reduces water quality and negatively impacts fish feeding, spawning, and overall stream productivity and health.

3. Intermittent and permanent tributaries are essential to the maintenance of the chemical integrity of navigable rivers. The basic chemical composition of unpolluted streams is largely established in headwater streams because these are the channels in closest contact with the soil, and they are the sites of extensive chemical and biological activity that influences water quality. For example, recent research has shown that over 40% of the nitrogen found in navigable rivers in the northeastern U.S. originates in headwater streams. Pollutants and contaminants introduced into headwaters will make their way down to navigable waters.

Recent research has also demonstrated that small streams in the network are the sites of the most active uptake, transformation, and retention of nutrients. For example, recent studies have shown that 64% of the inorganic nitrogen entering a stream is retained or transformed in the headwaters. When headwater streams are eliminated or degraded by excess inputs of pollutants, more of the nutrients being applied to farm fields and lawns are delivered to downstream lakes and estuaries. Nuisance algal blooms, low oxygen concentrations, and fish kills are potential consequences of these excess nutrients.

Small streams serve a vital role as buffers for larger rivers. Nutrients and contaminants enter streams from non-point sources primarily during storms, and it is during storms when ephemeral and intermittent streams are most likely to contain water. Hence the pollutant removal capacity of small streams is most significant when pollutant inputs from non-point sources are the greatest.

4. Intermittent and headwater tributaries contribute to the biotic integrity of river networks in many ways, diagrammatically illustrated in Figure 3. Here I highlight three types of contributions:

- Headwaters are the primary habitats of many aquatic and terrestrial species. For example, my colleagues and I have found over 290 taxa in tiny streams in North Carolina (Table 1). Many headwater species are either imperiled or yet undiscovered. A typical headwater stream probably contains hundreds of species of fishes, amphibians, insects, crustaceans, mollusks, worms and other invertebrates, vascular plants, and algae, as well as untold numbers of microbial species. Many of these species occur only in headwater streams, either because of the unique physicochemical conditions present in headwaters, or because headwaters provide refuges from predators, competitors, or alien species (Figure 3). Even intermittent streams have a rich fauna and flora; for example, summer-dry streams in Oregon have a higher species diversity than permanently flowing streams in the same river basin. Dozens to hundreds of headwater species are either listed as threatened or endangered by USFWS or are considered by NatureServe to be imperiled (G1 or G2). Even in relatively well-studied parts of the United States, biological surveys of headwater streams routinely turn up new species, genera, and even families of animals.

- Headwaters provide spawning habitat, serve as nursery areas, and offer a refuge from predators, competitors, invasive species, and stressful temperatures (Figure 3). Species may use small streams only part of the year, but it is essential that the streams are present and accessible when needed. For example, scientists have shown that brook trout in the Ford River, Michigan retreat to cooler headwaters in summer. Recent research in West Virginia showed that over 80% of brook trout reproduction occurred in headwater streams and intermittent seeps. In coastal streams in Oregon, scientists found that 11 – 21% of coho salmon spawned in intermittent streams, and the young salmon from intermittent tributaries were larger and therefore more likely to survive than those using permanent tributaries. Over 40% of adult rainbow trout in Sagehen Creek, California, spawned in an intermittent tributary while less than 15% spawned in the perennial main channel. In addition, terrestrial and riparian animals (e.g., birds, bats, other small mammals) find shelter and dispersal corridors along headwater streams.

- Headwaters supply food resources to downstream and riparian ecosystems (Figure 3). For example, fishless headwater streams in Alaska export enough food to support hundreds to thousands of young-of-the-year salmon in each mile of larger salmon-bearing stream. Bird and mammal species in wetlands and riparian zones adjacent to small streams feed on aquatic insects that emerge from the streams.

Conclusion

Extensive scientific research has shown that permanent and intermittent headwater streams are an integral part of a river network; they are not isolated from the larger navigable channels. They provide ecological goods and services of value to society. Whether or not they have a direct hydrologic connection to a navigable river during all months of the year, these headwater streams have a direct impact on the physical, chemical, and biotic integrity of navigable waters as I have illustrated in this testimony.

These small streams have traditionally been protected by the Clean Water Act. Recent Court decisions and agency guidance have not adequately incorporated scientific understanding that the entire river network requires protection. I believe that legislation to reaffirm the original intent of the Clean Water Act is needed to reunite the law with the science. It is critical that headwater streams, which are an extensive and valuable part of our nation's water resources, are clearly under the protection of the Clean Water Act.

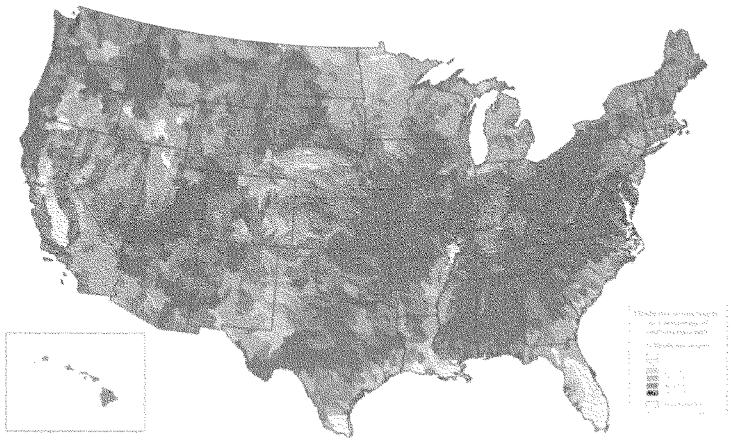

FIGURE 1. Headwater Stream Length, as a Proportion of Total Stream Length Within Each 8 Digit HUC Watershed in the U.S., Excluding Alaska, as Computed Querying the NHD RAD v2.0 for Reaches That Have No Other Inflowing Streams at the 1:100,000 Scale. The NHD RAD v2.0 Does not Capture Streams Under 1 mile (i.e., 1.61 km) in Length.

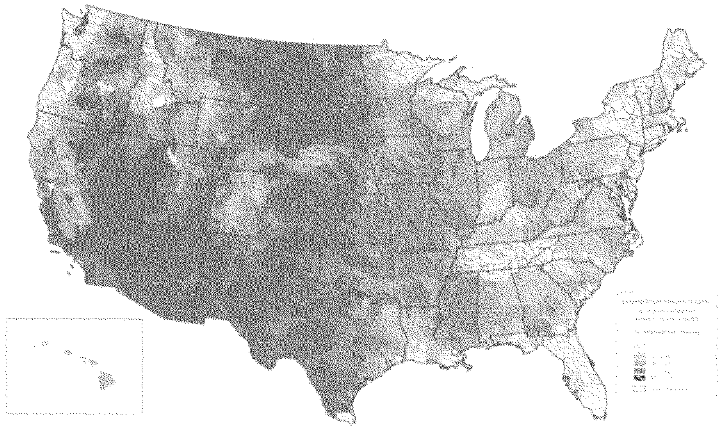

FIGURE 2. Combined Intermittent and Ephemeral Stream Length in the U.S., Excluding Alaska, as a Proportion of Total Stream Length Within Each 8 Digit HUC Watershed, as Computed by Querying the NHD RAD v2.0 for Reaches That Contain Water Only Part of the Year at the 1:100,000 Scale. The NHD RAD v2.0 does not capture streams under 1 mile (i.e., 1.61 km) in length.

Figures 1 and 2 are from T. Nadeau and M. Rains. 2007. Hydrological connectivity between headwater streams and downstream waters: how science can inform policy. Journal of the American Water Resources Association 43(1): 118-133.

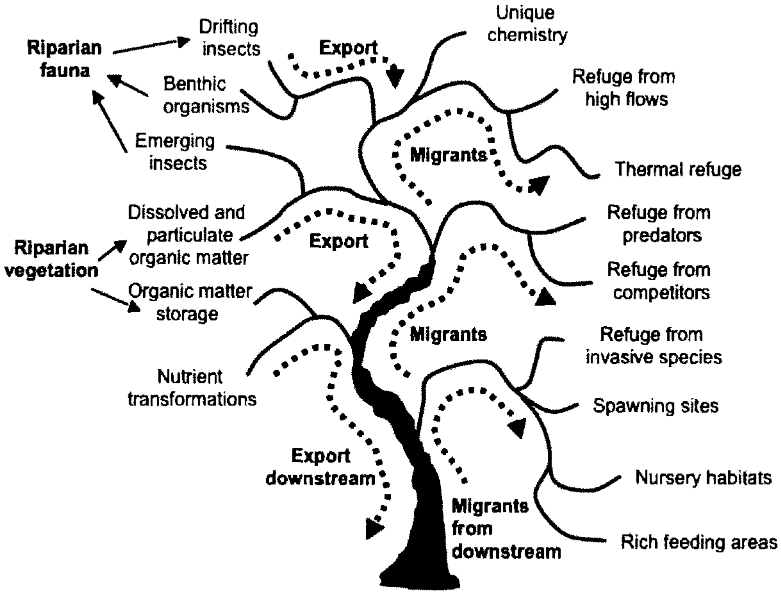

Figure 3: Factors that contribute to the biological importance of headwater streams in river networks. Attributes on the right benefit species unique to headwaters and also make headwaters essential seasonal habitats for migrants from downstream. On the left are biological contributions of headwater ecosystems to riparian and downstream ecosystems. From J.L. Meyer, D.L. Strayer, J.B. Wallace, S.L. Eggert, G.S. Helfman, and N.E. Leonard. 2007. The contribution of headwater streams to biodiversity in river networks. Journal of the American Water Resources Association 43(1): 86-103.

Table 1. A minimum estimate of taxa associated with three small, fishless, headwater streams in North Carolina (average discharge < 0.09 cfs draining watersheds only 12 -18 acres in size (from J.L. Meyer, D.L. Strayer, J.B. Wallace, S.L. Eggert, G.S. Helfman, and N.E. Leonard. 2007. The contribution of headwater streams to biodiversity in river networks. Journal of the American Water Resources Association 43(1): 86-103).

Taxon	Estimated number of taxa
Algae	30 diatom species 10 other algal taxa
Bryophyta	7 moss and 4 liverwort taxa
Fungi	51 taxa
Protista	> 7 taxa
Nematoda	> 10 taxa
Copepoda	5 species
Cladocera	1 species
Decapoda	1 species
Ostracoda	1 species
Gastrotrichia	> 5 taxa
Oligochaeta	> 4 taxa
Branchiobdellida	1 species
Rotifera	> 10 taxa
Turbellaria	> 4 taxa
Tardigrada	2 taxa
Acarina	> 3 taxa
Bivalvia	1 species
Ephemeroptera	4 families; 7 genera; > 7 spp.
Odonata	2 families; 2 genera; > 2 spp.
Plecoptera	6 families; 8 genera; > 8 spp.
Coleoptera	3 families; 4 genera; > 4 spp.
Trichoptera	14 families; 19 genera; > 20 spp.
Diptera	15 families; 55 genera; > 59 spp.
Hemiptera	2 genera; 2 spp.
Collembola	1 family; 1 genus; > 1 spp.
Arachnida	19 genera[a]
Amphibia	2 genera; 5 spp.
Reptilia	> 3 spp.
Aves	2 spp.
Mammals	4 spp.
TOTAL	**> 293 taxa**

JOURNAL OF THE AMERICAN WATER RESOURCES ASSOCIATION
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THE ROLE OF HEADWATER STREAMS IN DOWNSTREAM WATER QUALITY[1]

Richard B. Alexander, Elizabeth W. Boyer, Richard A. Smith, Gregory E. Schwarz, and Richard B. Moore[2]

ABSTRACT: Knowledge of headwater influences on the water-quality and flow conditions of downstream waters is essential to water-resource management at all governmental levels; this includes recent court decisions on the jurisdiction of the Federal Clean Water Act (CWA) over upland areas that contribute to larger downstream water bodies. We review current watershed research and use a water-quality model to investigate headwater influences on downstream receiving waters. Our evaluations demonstrate the intrinsic connections of headwaters to landscape processes and downstream waters through their influence on the supply, transport, and fate of water and solutes in watersheds. Hydrological processes in headwater catchments control the recharge of subsurface water stores, flow paths, and residence times of water throughout landscapes. The dynamic coupling of hydrological and biogeochemical processes in upland streams further controls the chemical form, timing, and longitudinal distances of solute transport to downstream waters. We apply the spatially explicit, mass-balance watershed model SPARROW to consider transport and transformations of water and nutrients throughout stream networks in the northeastern United States. We simulate fluxes of nitrogen, a primary nutrient that is a water-quality concern for acidification of streams and lakes and eutrophication of coastal waters, and refine the model structure to include literature observations of nitrogen removal in streams and lakes. We quantify nitrogen transport from headwaters to downstream navigable waters, where headwaters are defined within the model as first-order, perennial streams that include flow and nitrogen contributions from smaller, intermittent and ephemeral streams. We find that first-order headwaters contribute approximately 70% of the mean-annual water volume and 65% of the nitrogen flux in second-order streams. Their contributions to mean water volume and nitrogen flux decline only marginally to about 55% and 40% in fourth- and higher-order rivers that include navigable waters and their tributaries. These results underscore the profound influence that headwater areas have on shaping downstream water quantity and water quality. The results have relevance to water-resource management and regulatory decisions and potentially broaden understanding of the spatial extent of Federal CWA jurisdiction in U.S. waters.

(KEY TERMS: rivers/streams; nitrogen; transport and fate; streamflow; headwaters; *SWANCC*; Rapanos.)

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INTRODUCTION

Recent U.S. Supreme Court rulings, related to Clean Water Act (CWA) decisions by federal regulatory agencies (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency), underscore the need for an improved scientific understanding of the influence of headwater areas and upland (low-order) streams on the physical, chemical, and biological integrity of downstream waters, especially those legally classified as "navigable." An important 2001 U.S. Supreme Court ruling (*Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*; *SWANCC*) and subsequent court decisions interpreting the meaning of *SWANCC* focused on the scope of the CWA permit program as it applies to land development, and have raised questions about the jurisdiction of federal regulatory agencies over various U.S. waterways. The *SWANCC* case narrowed federal authority to protect many upstream and wetland areas, stated as isolated, non-navigable, intrastate waters that are not tributary or adjacent to navigable waters or their tributaries. In subsequent appellate circuit decisions, many questions have been raised about how to interpret the *SWANCC* decision (e.g., the definition of "adjacent") and about what parts of the tributary system are considered jurisdictional under the CWA. These decisions include several recent cases (2006: *Rapanos v. United States*, 04-1034, *Carabell v. Army Corps of Engineers*, 04-1384, and S.D. Warren Co. *v.* ME Board of Environmental Protection, 04-1527) that have not resolved questions about which wetland areas are protected by the CWA.

An improved scientific understanding of the influence of headwater streams on the integrity of downstream navigable waters (especially those that may have less obvious relationships to navigable-in-fact waters; see Federal Register, 2003) is viewed as a central need to assist policy makers, regulatory authorities, and the courts. Of particular interest in determining CWA jurisdiction is whether a "significant nexus" exists between upstream waters and navigable-in-fact waters. Such a connection could be based on evidence that the use, degradation, or destruction of non-navigable headwaters demonstrably affects downstream navigable waters and their tributaries. However, legal ambiguities currently exist as to what constitutes "navigable streams and their tributaries" – i.e., how far upstream does CWA jurisdiction actually extend into tributary reaches. A recent 2006 U.S. Supreme Court decision on the consolidated cases of *Rapanos v. United States & Carabell v. Army Corps of Engineers* failed to explicitly resolve these questions. The ruling specified that Federal CWA jurisdiction requires evidence of a "significant nexus" between upstream waters and navigable waters, based on a technical and scientific judgment by Federal regulators. The cases were remanded to the lower courts for re-evaluation under these guidelines.

Our study provides scientific insight into the coupled hydrological, chemical, and biological influences of headwater systems on downstream navigable waters and their tributaries. An earlier synthesis effort (Nadeau and Leibowitz, 2003) summarized current scientific knowledge of the hydrological and biologic connections between "isolated" wetlands and downgradient surface-water systems. Although a broad range of types of material fluxes and concentrations in headwater and larger streams is ultimately of interest in discussions of headwater connectivity, we focus in this study exclusively on a discussion of nitrogen fluxes in surface waters.

Nitrogen is an essential nutrient that regulates primary production in terrestrial and aquatic ecosystems. Nitrogen inputs to landscapes have increased markedly over the past 50 years across the globe in response to increased food and energy production, which has created an abundant supply of highly reactive forms of nitrogen in air, land, and water (Galloway *et al.*, 2004). Excess nitrogen has been linked to many environmental concerns, including the disruption of forest ecosystem processes (Aber *et al.*, 2003), acidification of lakes and streams (Driscoll *et al.*, 2001), and degradation of coastal waters including high profile water quality issues such as eutrophication, hypoxia, and harmful algal blooms (NRC, 2000). Nitrogen is also the focus of recent USEPA efforts to establish nutrient criteria in U.S. streams, lakes, and estuaries (USEPA, 2000). Moreover, because nitrogen is highly reactive and mobile in terrestrial and aquatic ecosystems, it also serves as a relatively suitable surrogate for many contaminants and potentially toxic substances in water where understanding of the linkages between headwaters and downstream receiving waters is important. Although the complexities of nitrogen cycling in terrestrial and aquatic ecosystems are notable, a considerable body of experimental research and large-scale budgeting and modeling analyses has emerged to support reliable descriptions of the sources and transport of nitrogen over broad spatial scales within streams and rivers.

Our study is organized in two major sections. The first section provides an overview of the principal conceptual frameworks and current watershed research relevant to evaluating the role of headwater streams in controlling nitrogen conditions in downstream waters. This synthesis illustrates current understanding of the coupling of land use, pollutant sources, and hydrological and biogeochemical processes on the landscape and how these activities and processes control the supply and delivery of water and nitrogen flux to headwater streams. We further examine the function that stream channels play in controlling water routing and instream processing and their effects on nitrogen transport from headwaters to downstream waters.

In the second section of the article, we use the water-quality model SPARROW (SPAtially Referenced Regression On Watershed attributes; Smith *et al.*, 1997) to investigate and quantify headwater influences in streams of the northeastern United States. SPARROW is a hybrid statistical/mechanistic watershed model with mass-balance constraints. The model descriptions of landscape and aquatic processes are sufficiently detailed to support an assessment of the effects of headwater processes and pollutant sources on water-quality conditions throughout large river networks. Although progress has been made in empirically modeling the transport of nitrogen in streams (e.g., Seitzinger *et al.*, 2002), most empirical watershed models lack mass-balance constraints and do not separate land and water processes. These features are necessary to accurately quantify nutrient transport in streams of varying sizes in river networks (e.g., Smith *et al.*, 1997; Alexander *et al.*, 2002a,b). Moreover, dynamic mechanistic watershed models (e.g., HSPF; Bicknell *et al.*, 2001), although providing detailed predictions of nitrogen flux over time in response to short-term changes in climate, hydrology, and nutrient cycling dynamics, are frequently applied only in small catchments and lack the spatial detail and observational data needed to quantify the fate of headwater nitrogen sources and cycled nitrogen in large river networks. To enhance our model-based descriptions of nitrogen transport from headwaters to downstream navigable waters and their tributaries, we modify the structure of a previous SPARROW model (Moore *et al.*, 2004) to incorporate observations of nitrogen removal in streams and lakes from the primary literature. We use the refined model to assess the effects of streamflow and nitrogen supply and removal processes in headwaters on the flow and nitrogen conditions in downstream waters.

THE COMPLEX INTERACTIONS OF NITROGEN IN WATERSHEDS

Landscape and Water Interactions

Although nutrients are associated with healthy watersheds and the provision of ecosystem services, they also can act as pollutants. Commonly described as "too much of a good thing," it is the overabundance of nitrogen loadings that leads to negative environmental effects. Nitrogen in the environment has vastly increased in recent decades, largely associated with growing populations and associated land use, from: (1) creation of reactive nitrogen, via the Haber-Bosch process, for fertilizers and other industrial applications; (2) cultivation of vast land areas of crops that host nitrogen-fixing bacteria; and (3) fossil fuel burning and the associated emissions and nitrogen deposition (Smil, 2001). Worldwide, human activities have more than doubled the amount of reactive N entering the environment (Vitousek *et al.*, 1997; Galloway *et al.*, 2004). In an individual watershed, the distribution of human and animal populations, land use, and characteristics of the vegetation and soils set the stage for the types, magnitudes, and geography of nitrogen inputs (Boyer *et al.*, 2002).

Stemming from nitrogen inputs to landscapes, nitrogen fluxes in many surface waters have increased in recent decades, and two-thirds of the nation's estuaries are degraded from nitrogen pollution (Bricker *et al.*, 1999). Nitrogen flux in streams and rivers of any size is the cumulative result of processes that control the supply and transport of nitrogen in terrestrial and aquatic ecosystems. These occur throughout the watershed system from the headwater source areas to the downstream receiving waters (Howarth *et al.*, 1996; Seitzinger *et al.*, 2002; Van Breemen *et al.*, 2002; McClain *et al.*, 2003). As a result, nitrogen pollution and other nutrient problems are increasingly being addressed by researchers and management agencies by considering the intrinsic linkages between terrestrial upland landscapes and the aquatic systems to which they drain (Driscoll *et al.*, 2003; Grimm *et al.*, 2003).

Nitrogen fluxes in surface waters are controlled to a large degree by heterogeneous distributions of nitrogen inputs (Howarth *et al.*, 1996; Boyer *et al.*, 2002). The environmental setting – e.g., climate, topography, vegetation, and soil properties – also shapes both land use (and the types of nitrogen sources) and how nitrogen inputs are mediated. Nitrogen is highly reactive, ensuring biogeochemical processing and transformations in landscapes, including nutrient production mechanisms, assimilation and uptake in plant material, and permanent removal via denitrification (Davidson and Schimel, 1995; Van Breemen *et al.*, 2002; Boyer *et al.*, 2006b). Denitrification is a process whereby the reactive forms of nitrogen are transformed into dinitrogen (N_2) gas, which is highly inert and does not have any adverse environmental consequences (and, in fact, is the dominant component of the earth's atmosphere). Further, nitrogen is highly soluble and is transported easily in water, influenced by hydrological processes including flow paths and residence times of water throughout the watershed (Cirmo and McDonnell, 1997; Band *et al.*, 2001). Collectively, nitrogen sources to landscapes along with coupled hydrological and biogeochemical processes occurring throughout the watershed strongly affect the timing and form of nitrogen delivery to surface waters and the areas of the landscape that contribute nitrogen to streams. In temperate regions, the hydrologically connected soils and land areas that drain to streams expand and contract both laterally and vertically during periods of wetting and drying. During wet periods, this causes saturated areas of the landscape to expand, especially riparian areas, which facilitates both the delivery of nitrogen to streams and its loss via denitrification. Considering such factors, environmental scientists have been successful in simulating nitrogen delivery to surface waters at many spatial and temporal scales (Creed and Band, 1998; Alexander *et al.*, 2000, 2002a; Band *et al.*, 2001; McIsaac *et al.*, 2001; Howarth *et al.*, 2002; Boyer *et al.*, 2006a).

Once nitrogen is delivered to streams or rivers, the aquatic ecosystem itself plays a critical role in modifying the nitrogen (and other material) fluxes, via channel routing and instream processing. Stream channels have a natural dendritic design that plays an intrinsic role in transporting nitrogen and other pollutants from widely dispersed upstream sources and concentrating these materials in downstream waters. Hyporheic zones of streams also play a key role in nitrogen transformations (uptake and cycling) and permanent removal (i.e., denitrification) as nitrogen is exposed to reactive benthic surfaces during transport. The hyporheic zone, literally meaning under the flow, is the zone of sediments beneath and beside the stream where surface water (from the stream) and subsurface water are exchanged, hydrologically linking this zone of sediments to the stream channel. Strong gradients in the oxygen status and nutrient content of streambed sediments occur due to hyporheic exchange, that is, the mixing of the aerated and thus well-oxygenated streamwater with deeper and anoxic subsurface flows (Bencala, 1993). Such redox gradients found in hyporheic regions create metabolically active zones that facilitate transformations of many elements of water quality. Exchange of surface water with the streambed sediments provides opportunities for denitrification to occur (Duff and Triska, 2000). Large fractions of nitrogen inputs to streams are lost via denitrification in hyporheic sediments at all scales from headwater streams to large rivers (Peterson *et al.*, 2001; Thomas *et al.*, 2001; Seitzinger *et al.*, 2002; Böhlke *et al.*, 2004; Mulholland *et al.*, 2004; Boyer *et al.*, 2006b; Triska *et al.*, this issue).

Detailed studies of individual watersheds, where hydrological and biogeochemical processes are measured and observed over space and time, provide a scientific basis to understand the dominant factors controlling water quality and nitrogen and provide insight into how to quantify such responses at watershed and regional scales with modeling approaches. For example, the U.S. Geological Survey's Water, Energy, and Biogeochemical Budgets (WEBB) program was designed to understand processes occurring in small watersheds located in geographically diverse environments that represent a range of hydrological, ecological, and climatic conditions. Controls on nitrogen transport and transformation over a variety of scales are being examined in nested catchments from 3 ha to 110 km^3 (J. Shanley and S. Sebestyen, 2005, personal communication) at the Sleeper's River WEBB site, located in the Green Mountains of northeastern Vermont. Results from this site provide a window into the importance of coupled hydrological and biogeochemical processes that affect water quality. The supply of nitrogen from this forested, headwater catchment to its receiving waters is controlled to a large degree by soil biogeochemical processes that provide sources of nitrogen from organic matter, and hydrological processes that connect the landscape to streamflow. Flow paths and residence times of water in the landscape strongly influence streamwater nitrogen concentrations. The temporal variation of nitrogen in the stream (Figure 1) is tightly linked to cycles of water (e.g., influence of spring snowmelt and associated runoff) and carbon (e.g., in dissolved organic forms, DOC), and reflects contributions of flow and solutes from both upland hillslopes and near stream riparian zones of the landscape (McGlynn *et al.*, 1999; Shanley, 2000).

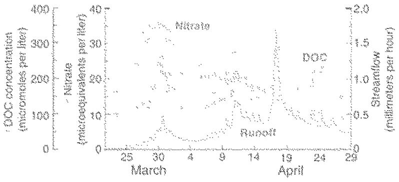

FIGURE 1. Flow Paths and Residence Times of Water in the Landscape Strongly Influence the Magnitude and Variation of Nitrate Concentrations in Headwater Streams. Reprinted from Shanley (2000).

Such results are not limited only to small catchments, but are observed at all watershed scales. For example, nitrogen sources and fate have been studied for over 30 years in the large Fall Creek watershed

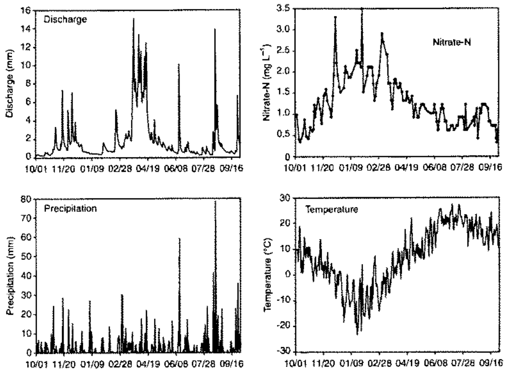

FIGURE 2. Records of Discharge, Precipitation, Nitrate-N, and Temperature at Fall Creek, NY, During 2003-04.

in central New York, a mixed-land-use basin containing large amounts of forest (53%) and agricultural (42%) land that drain an area of 327 km^2. Nitrogen primarily from atmospheric deposition, fertilizers, and manure, is delivered to the stream during rain and snowmelt events, with a large degree of direct connectivity of the upland landscape to the stream. Precipitation and streamflow are well distributed throughout the year (Figure 2). Despite this, instream nitrogen concentrations are notably influenced by seasonal variability, as indicated by air temperature (Figure 2). During the growing season (high temperatures), plants are able to utilize much of the nitrogen inputs to support their growth and productivity. Denitrification, a temperature-dependent process, is also important in consuming nitrogen during these periods. These results are consistent throughout the entire 30-year period of record at the site, and further illustrate the importance of coupled hydrological and biogeochemical controls affecting water quality.

Nitrogen Transport From Headwaters to Higher-Order Streams

Mathematical models of the instream routing and biogeochemical processes that control the transport of nutrients and other solutes provide insight into the influence of headwater catchments and streams on the quality of downstream waters. The dynamics of solute transport in streams can be modeled (e.g., Stream Solute Workshop, 1990; Runkel, 1998) according to the processes of advection, dispersion, ground-water inputs, transient storage (e.g., in hyporheic zones), and nonconservative transport (e.g., uptake, denitrification). One-dimensional, steady state forms of these models provide a simplified description of nutrient transport according to a first-order exponential-decay process (e.g., Newbold *et al.*, 1981; Stream Solute Workshop, 1990; Chapra, 1997; Donner *et al.*, 2004). Nutrient transport is mediated in these models by a reaction-rate coefficient (in units of reciprocal time) and the water time of travel over a given length of stream channel (determined as the product of channel length and the reciprocal of water velocity). The steady-state reaction-rate expression reflects the aggregate, net effects of the physical, hydrological, and biochemical properties of the channel and hyporheic zone on nutrient removal. These model expressions have been advanced as part of *nutrient spiraling* concepts (Newbold *et al.*, 1981); these concepts describe the downstream transport of nutrients as a series of repeated cyclical transformations that entail nitrogen migration to the benthos via biological uptake and organic nitrogen storage and a return to the water column via mineralization and nitrification. Nutrient decay processes in these models may also include the permanent removal of nitrogen from streams via denitrification.

First-order exponential decay functions have been developed to predict nitrogen transport and losses in streams of widely varying sizes, based on empirical observations from the literature of the effects on nitrogen transport of various hydrologic and geometric properties, such as water depth, flow, velocity, and channel slope (Kelly *et al.*, 1987; Molot and Dillon, 1993; Howarth *et al.*, 1996; Alexander *et al.*, 2000, 2002a, 2004; Seitzinger *et al.*, 2002). Studies (Howarth *et al.*, 1996; Peterson *et al.*, 2001; Seitzinger *et al.*, 2002; Boyer *et al.*, 2006b) also indicate that the rates of nitrogen uptake and permanent loss via denitrification in streams generally decline in a downstream direction with increases in stream size (i.e., with increases in mean water velocity, streamflow, and depth). Headwaters and other low-order streams are important locations for nitrogen loss in river networks given that their large benthic surface area relative to the overlying water volume generally leads to greater contact and exchange of water and nitrogen with the hyporheic zone (Alexander *et al.*, 2000; Peterson *et al.*, 2001). Small streams also generally have greater benthic frictional resistance and hyporheic storage (relative to the channel water volume) than large streams and rivers (Harvey and Wagner, 2000; Harvey *et al.*, 2003), which may contribute to their higher observed rates of nitrogen loss.

Based on current understanding of these processes, land-use changes or modifications to stream channels that increase the rates of flow in headwater streams may heighten their influence on the chemical quality of downstream receiving waters. For example, increases in the peak discharge and flashiness of flows that are often associated with urbanization would be likely to reduce the natural processing of nitrogen in low-order streams, increasing the distance over which nitrogen is transported downstream. In addition, stream channelization projects that straighten channels and remove natural pools and riffles are likely to shorten the water travel time in stream reaches; this would also be likely to reduce nitrogen losses and increase downstream transport.

Some exceptions to these general patterns in nutrient transport are of note. One is the importance of floodplains and the riparian areas of large rivers, including, for example, the Mississippi and southeastern U.S. rivers, as sites for nitrogen loss via denitrification during floods. The increase in water depth during floods on these rivers actually increases the contact of nitrogen with microbially reactive floodplain sediments and promotes denitrification (NRC, 2002; Richardson *et al.*, 2004; Scott *et al.*, 2004). Another is the potential for the first-order properties of nitrogen reaction rates to break down in nutrient-enriched waters where denitrification (Garcia-Ruiz *et al.*, 1998) or uptake processes (Dodds *et al.*, 2002) become concentration saturated. Under these conditions, a lower reaction rate would be expected and nitrogen could be transported for longer distances in streams than would occur under nonsaturated conditions. Therefore, headwater catchments with high stream nitrogen concentrations, such as those found in highly urbanized or cultivated catchments, could have an even more far-reaching downstream influence than headwater streams draining relatively undeveloped catchments with low nitrogen concentrations.

Despite the extensive cycling of nitrogen and generally high rates of nitrogen loss in small streams and the terrestrial ecosystems of watersheds (e.g., Howarth *et al.*, 1996; Boyer *et al.*, 2002), there is mounting evidence that the nitrogen in downstream receiving waters is strongly connected to distant landscape sources and responds relatively rapidly to changes in these sources. These connections are observed in watershed studies at small spatial scales, such as those cited earlier, as well as in large-scale studies. One example of the latter is the Mississippi River Basin, where most of the nitrogen loadings at the Mississippi outlet to the northern Gulf of Mexico are transported from distant, inland agricultural watersheds (Alexander *et al.*, 2000). Annual changes in nitrogen load at the outlet correspond closely to contemporaneous annual changes in runoff and nitrogen inputs from agricultural fertilizers and other sources in the basin as well as changes in nitrogen inputs during the preceding 5 years (Goolsby *et al.*, 1999; McIsaac *et al.*, 2001). European studies (e.g., Stalnacke *et al.*, 2003) suggest that improvements in oxygen conditions on the northwestern shelf of the Black Sea in the early and mid-1990s near the outlet of the 800,000 km^2 Danube River Basin occurred in response to upstream reductions in farm subsidies and the use of fertilizers in several eastern European countries following the dissolution of the former Soviet Union in 1991. The nitrogen response to fertilizer reductions has been less rapid (>10 years) in streams draining certain other eastern European watersheds (Stalnacke *et al.*, 2003).

These regional-scale studies suggest that headwater and other low-order streams may play an important role in the observed linkages between landscape pollutant sources, such as agricultural fertilizers and livestock wastes, and the long-distance transport and delivery of nitrogen to higher-order streams and coastal receiving waters. The downstream influences of landscape sources are likely facilitated by the high density of first-order (headwater) streams and their high frequency of tributary connections with all higher-order streams – properties that are intrinsic to dendritic river networks (e.g., see discussion of Tokunaga's Law in Dodds and Rothman, 2000). These characteristics suggest that changes in the physical or chemical condition of headwaters or their catchments could potentially influence both nitrogen and flow conditions in downstream waters. In the following section, we investigate the nature of headwater connections to pollutant sources and higher-order streams and their influence on flow and nitrogen conditions in downstream waters by applying the SPARROW model to a spatially detailed network of streams and rivers.

ASSESSING THE DOWNSTREAM EFFECTS OF HEADWATERS

Model Specification

The steady-state SPARROW model describes nutrient source inputs and one-dimensional transport in terrestrial and aquatic ecosystems, including first-order decay in streams and reservoirs. Model parameters are statistically estimated from a calibration to mean-annual nitrogen loads (mass per unit time) that are computed from periodically measured nutrient concentrations and daily flow measurements at multiple stream monitoring stations. The use of mean-annual loads in the model adjusts for temporal variability related to long-term trends and short-term changes in flow and instream nitrogen cycling and transformation processes. As a consequence, the model estimates the hydrological and biogeochemical processes that affect the long-term supply, loss, and transport of nitrogen in watersheds (Alexander *et al.*, 2000; Schwarz *et al.*, 2006). This mass-balance specification of the model is well suited for assessing the natural and human-related properties of headwaters that govern the long-term generation and transport of nitrogen and its fate in higher-order streams and downstream receiving waters. Notably, mass-balance approaches have generated considerable interest in recent years to further understanding of the long-term effects of nitrogen supply and transport on inland and coastal eutrophication (e.g., Howarth *et al.*, 1996; Vitousek *et al.*, 1997; Carpenter *et al.*, 1998; NRC, 2000; Boyer *et al.*, 2002).

The model structure, supporting equations, and details of the model estimation are given in Schwarz *et al.* (2006). Conceptually, the model is applied to individual stream reaches through a mathematical equation in which F'_i is the model-estimated mean-annual total nitrogen flux leaving reach i. This flux is related to the flux leaving adjacent reaches upstream of reach i, denoted by N'_j where j indexes the set $J(i)$ of adjacent reaches upstream of reach i, plus additional flux that is generated within the incremental reach segment i. In most cases, the set of adjacent upstream reaches $J(i)$ will consist of either two reaches, if reach i is the result of a confluence, or no reaches if reach i is a headwater reach. The functional relationships determining reach i flux are given by

$$F_i^* = \left[\left(\sum_{j\in J(i)} F'_j\right) A(\mathbf{Z}_i^{\mathrm{S}}, \mathbf{Z}_i^{\mathrm{R}}; \boldsymbol{\theta}_{\mathrm{S}}, \boldsymbol{\theta}_{\mathrm{R}}) + \left(\sum_{n=1}^{N_{\mathrm{S}}} S_{n,i}\alpha_n D_n(\mathbf{Z}_i^{\mathrm{D}}; \boldsymbol{\theta}_{\mathrm{D}})\right) A'(\mathbf{Z}_i^{\mathrm{S}}, \mathbf{Z}_i^{\mathrm{R}}; \boldsymbol{\theta}_{\mathrm{S}}, \boldsymbol{\theta}_{\mathrm{R}})\right]\varepsilon_i \quad (1)$$

The first summation term represents the amount of flux that leaves upstream reaches and is delivered downstream to reach i, where F'_j equals measured flux, F_j^{M}, if upstream reach j is monitored or, if it is not, is given by the model-estimated flux F_j^*. $A(\cdot)$ is the stream delivery function representing loss processes acting on flux as it travels along the reach pathway. This function defines the fraction of flux entering reach i at the upstream node that is delivered to the reach's downstream node. The factor is a function of measured stream and reservoir characteristics, denoted by the vectors $\mathbf{Z}^{\mathrm{S}}$ and $\mathbf{Z}^{\mathrm{R}}$, with corresponding coefficient vectors $\boldsymbol{\theta}_{\mathrm{S}}$ and $\boldsymbol{\theta}_{\mathrm{R}}$. If reach i is a stream, then only the $\mathbf{Z}^{\mathrm{S}}$ and $\boldsymbol{\theta}_{\mathrm{S}}$ terms determine the value of $A(\cdot)$; conversely, if reach i is a reservoir then the terms that determine $A(\cdot)$ consist of $\mathbf{Z}^{\mathrm{R}}$ and $\boldsymbol{\theta}_{\mathrm{R}}$.

The second summation term represents the amount of flux introduced to the stream network at reach i. This term is composed of the flux originating in specific sources, indexed by $n = 1, \ldots, N_{\mathrm{S}}$. Associated with each source is a source variable, denoted by S_n, and its associated source-specific coefficient, α_n. This coefficient retains the units that convert the source variable units to flux units. The function $D_n(\cdot)$ represents the land-to-water delivery factor. For sources associated with the landscape, this function, along with the source-specific coefficient, represents the rate at which the source variable is converted to nitrogen mass that is delivered to streams. The land-to-water delivery factor is a source-specific function of a vector of delivery variables, denoted by $\mathbf{Z}_i^{\mathrm{D}}$, and an associated vector of coefficients $\boldsymbol{\theta}_{\mathrm{D}}$. For point sources that are described by a measured discharge of mass directly to the stream channel (e.g., municipal wastewater effluent), the delivery factor takes on a value of 1, with no underlying factors acting as determinants, and the estimated source-specific coefficient should be close to 1. The last term in the equation, the function $A'(\cdot)$, represents the fraction of flux originating in and delivered to reach i that is transported to the reach's downstream node and is similar in form to the stream delivery factor defined in the first summation term of the equation. If reach i is classified as a stream (as opposed to a reservoir reach), the nitrogen introduced to the reach from its incremental drainage area receives the square root of the reach's full instream delivery. This assumption is consistent with the notion that contaminants are introduced to the reach network at the midpoint of reach i and thus are subjected to only half of the reach's time of travel. Alternatively, for reaches classified as reservoirs, we assume that the nitrogen receives the full attenuation defined for the reach.

The multiplicative error term, ϵ_i, is applicable in cases where reach i is a monitored reach; the error is assumed to be independent and identically distributed across independent sub-basins in the intervening drainage between stream monitoring sites. Coefficient estimation is performed on the log transforms of the summed quantities in Equation (1) using nonlinear least-squares estimation (Schwarz *et al.*, 2006).

Nitrogen loss in streams is modeled according to a first-order decay process (Chapra, 1997) in which the fraction of the nitrogen mass originating from the upstream node and transported along reach i to its downstream node is estimated as a continuous function of the mean water time of travel (T_i^S; units of time) in reach i and a first-order reaction rate that is expressed as a power function of the mean water depth, D_i, such that

$$A\left(\mathbf{Z}_i^S, \mathbf{Z}_i^R; \boldsymbol{\theta}_S, \boldsymbol{\theta}_R\right) = \exp\left(-\theta_{S1} D_i^{\theta_{S2}} T_i^S\right) \qquad (2)$$

where θ_{S1} (a coefficient in units of length^{-1} time^{-1}) and θ_{S2} are estimated coefficients. A similar power function has been previously evaluated in SPARROW for streamflow (Alexander *et al.*, 2002a; Elliott *et al.*, 2005; Schwarz *et al.*, 2006). The nitrogen loss-rate coefficient (in units of reciprocal time), which is calculated as the product of the estimated coefficients and mean water depth, is dependent on properties of the water column that are proportional to water volume, such as streamflow and depth (Stream Solute Workshop, 1990).

Nitrogen loss in lakes and reservoirs is modeled according to a first-order process (e.g., Kelly *et al.*, 1987) in which the fraction of the nitrogen mass originating from the upstream reach node and transported through the reservoir segment of reach i to its downstream node is estimated as a function of the reciprocal of the areal hydraulic load $\left(q_i^R\right)^{-1}$ (units of length time^{-1}) for the reservoir associated with reach i and an apparent settling velocity coefficient (θ_{R0}; units of length time^{-1}), such that

$$A\left(\mathbf{Z}_i^S, \mathbf{Z}_i^R; \boldsymbol{\theta}_S, \boldsymbol{\theta}_R\right) = \frac{1}{1 + \theta_{R0}\left(q_i^R\right)^{-1}} \qquad (3)$$

Additional details on this formulation are given in Alexander *et al.* (2002a) and Schwarz *et al.* (2006). The areal hydraulic load is estimated in this study as the quotient of the outflow discharge to the surface area of the impoundment, but may also be determined from the ratio of the mean depth to the solute residence time of the impoundment.

Model Estimation

Our application of the model to catchments and streams in the northeastern United States is based on a previous SPARROW application (Moore *et al.*, 2004) to the 1:100,000 scale National Hydrography Dataset (NHD; USGS, 1999). The water-quality and geographic data for the nutrient sources and watershed properties are described in detail in this earlier study (Moore *et al.*, 2004). The parameters of Equations (1)-(3) are estimated using the mean-annual total nitrogen loads at 65 stream monitoring stations. The mean-annual loads were computed by applying flux-estimation procedures to daily records of flow and periodic measurements of total nitrogen concentration; total nitrogen is determined as the sum of dissolved nitrate-nitrite and total organic plus ammonia nitrogen concentration measurements (Moore *et al.*, 2004). The explanatory variables in the model include four nitrogen sources (municipal wastewater discharges, atmospheric deposition, and runoff from cultivated and developed urban and suburban lands), one terrestrial land-to-water attenuation factor (soil permeability) that is applied with equal proportional effect to all sources except municipal wastewater discharges, and a total of three nitrogen-decay coefficients for streams and reservoirs as specified in Equations (2) and (3).

The modeled region contains approximately 42,000 stream reaches having a mean catchment size of 4.4 km^2, based on watershed boundary delineations from 30-m digital elevation data. The mean-annual streamflow for each stream reach was calculated as the sum of the mean-annual runoff for the incremental drainage area of each stream catchment and that from all upstream catchments. For 211 available gaged stream stations, most (53%) had estimated streamflows within 5% of the gaged flow; 83% had estimated flows within 10%, and 93% had estimated flows within 15% of the gaged flow. Time-of-travel estimates for Equation (2) were computed from published regression equations (Jobson, 1996) that estimate mean water velocity as a function of mean streamflow, reach slope, and the total drainage area of each stream reach. Selected properties of the approximately 23,000 headwater NHD reaches are presented in Table 1.

We estimate two additional aquatic transport functions in the model to assist in quantifying the rates of nitrogen removal in northeastern streams and lakes as a continuous function of the size and hydraulic properties of these water bodies. The parameters of these functions are estimated using current literature rates of nitrogen removal reported for streams and lakes in North America, Europe, and New

TABLE 1. Geometric and Hydraulic Properties of NHD Headwater Reaches for Northeastern U.S. Streams.

Metric	Percentiles (Number Reaches = 23,253)				
	10tb	25th	50th	75th	90th
Drainage area (km^2)	0.8	1.8	3.7	7.3	12.9
Mean-annual streamflow (m^3/s)	0.02	0.04	0.08	0.15	0.28
Mean water depth* (m)	0.06	0.07	0.10	0.12	0.16
Mean water travel time (days)	0.02	0.05	0.09	0.14	0.19

*Depth = $0.2612Q^{0.3966}$, where Q is the mean-annual streamflow (Alexander *et al.*, 2000).

Zealand (Seitzinger *et al.*, 2002; Böhlke *et al.*, 2004; Mulholland *et al.*, 2004). This information provides a generally comprehensive description of what is currently known about nitrogen transport across large spatial scales, and thus, gives a more refined method for assessing the influence of headwater sources and processes on downstream nutrient conditions.

The stream transport function describes the fraction of nitrogen mass that is transported along the experimentally studied reaches, denoted by TR_i^S for reach i, expressed as a function of the stream characteristics according to

$$TR_i^S = \exp\left(-\theta_{S1} D_i^{\theta_{S2}} T_i^S\right)\varepsilon_i^S \tag{4}$$

where the variables and coefficients in the exponential function are identical to those in Equation (2), and ε_i^S is an error term, independent across measurements, having a variance that may differ from the error term appearing in Equation (1). Literature estimates of the nitrogen transport fraction, TR_i^S, are based on denitrification and mass-balance measurements of nitrogen loss for 12 streams (see Seitzinger *et al.*, 2002; Böhlke *et al.*, 2004; Mulholland *et al.*, 2004; we use the reported estimates of the mean depth and water time of travel for the studied reaches). Many of the measurements of denitrification are based on summer, low-flow conditions and are assumed to be representative of the rates during other periods of the year.

The reservoir transport function describes the fraction of the nitrogen mass that is transported in experimentally studied lakes, denoted by TR_i^L for lake i, expressed according to

$$TR_i^L = \frac{1}{1 + \theta_{R0}(q_i^R)^{-1}}\varepsilon_i^L \tag{5}$$

where the coefficient and variable in the denominator of the expression are the same as those defined in Equation (3), and ε_i^L represents an independent and identically distributed error term having a variance that potentially differs from ε_i and ε_i^S in Equations (1) and (4). The literature estimates of the nitrogen transport fraction, TR_i^L, are based on denitrification and mass-balance measurements of nitrogen loss for 36 lakes (see Seitzinger *et al.*, 2002; we use the reported estimates of the mean depth and water residence time for the studied lakes to calculate the areal hydraulic load).

The three components comprising the SPARROW model consist of Equation (1) [with instream delivery fraction given by Equation (2) and reservoir delivery fraction given by Equation (3)] estimated using the instream load observations for 65 stream monitoring stations, Equation (4) estimated using the 12 literature estimates of stream delivery fraction, and Equation (5) estimated using the 36 literature estimates of lake delivery fraction. A two-step procedure was used to simultaneously estimate the coefficients of the three equations. In the first step, the model is estimated using all observations, both those associated with the monitoring station data and those associated with the literature measurements, with each observation given equal weight. The error estimates from this initial model are consistent estimates of the true errors and are used to estimate the relative variances of the three model components. The model was then re-estimated in a second step using weighted nonlinear least squares, weighting each observation according to the respective reciprocal variance (i.e., 1/RMSE^2; RMSE = root mean square error) of the model error (weighting factors: lakes = 1/0.2925; streams = 1/0.0099; monitoring loads = 1/0.16). The weights are used to account for the level of uncertainty associated with the different types of measurements used in the model.

Model Predictions and Simulation Methods

We use the estimated model to investigate the supply and transport of nitrogen and water in streams of varying sizes within the northeastern river network, ranging from small headwater streams to large rivers. Stream size is defined according to the Horton-Strahler stream-order number (Horton, 1945; Strahler, 1957; see Figure 3). We assigned stream-order numbers to NHD reaches using a previously developed algorithm (K. Lanfear, USGS, 2005, written communication). The Strahler ordering system produces a dendritic, hierarchical classification in which headwater streams (i.e., streams with no tributaries) are classified as order 1 with all subsequent streams of the nth order being located downstream of the confluence of two $(n - 1)$th order streams. The number of reaches and sum of the incremental drainage area for the NHD streams both decline at a similar rate with increasing stream order (see Figure 3b)

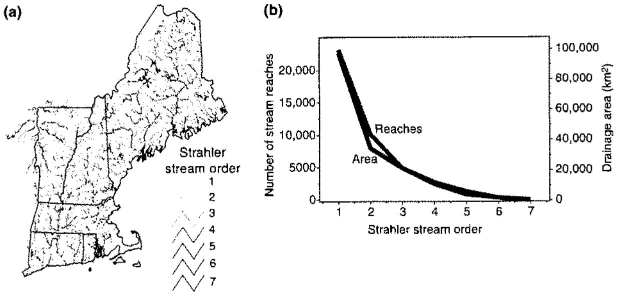

FIGURE 3. Stream Reaches From the National Hydrography Dataset for the Northeastern United States: (a) Strahler Stream-Order Number by Reach; (b) Number of Reaches and Total Drainage Area for Stream Reaches Classified by Strahler Stream-Order Number.

that is generally consistent with Horton's geometric-scaling laws. These scale-invariant laws correspond to the fractal structure of drainage networks (Peckham and Gupta, 1999) and describe fundamental mathematical properties that relate to the similar spatial organization of various topographic and geometric properties, including stream number, drainage area, and stream length, throughout the hierarchy of stream network systems (Rodriguez-Iturbe and Rinaldo, 1997; Peckham and Gupta, 1999).

We use the Horton-Strahler stream classification with the model predictions to quantify the pollutant sources and rates of nitrogen delivery within streams of varying sizes in the northeastern NHD river network. We track nitrogen delivery to NHD reaches from the four pollutant sources within the *incremental* drainage area of each reach. The *incremental* area of a stream reach is defined as the catchment drainage area from which water and nitrogen directly enter the reach, independent of the drainage area of upstream reaches that hydrologically connect to the reach. We summed the mass of nitrogen delivered from all incremental drainage areas of NHD stream reaches within each Strahler stream-order class and for each pollutant source. Similarly, we also use the network data on streamflow to quantify the flow contributions from the incremental drainage areas of different sized NHD reaches by summing the incremental reach flows separately among reaches with similar Strahler stream-order numbers.

We use several model simulations to investigate the influence of nitrogen sources, streamflow, and instream processing in headwater catchments on the mean-annual nitrogen and flow conditions in downstream waters. First, to quantify the downstream contributions of headwater nitrogen loads, we set the total inputs from all nitrogen sources in headwater streams to zero in the model and track the resulting change in nitrogen loads in all higher-order streams (orders 2-7). The results quantify the percentage of the downstream loads in each Strahler stream-order class that originates collectively from the 23,253 headwater catchments. Similar evaluations for mean-annual flow quantify the percentage of the flow in each stream-order class that originates from headwater catchments.

Second, we refine the model simulations to investigate the downstream effects on nitrogen loads from changes in pollutant sources in various collections of randomly selected headwater catchments. These simulations, which randomly select from 10% (2,325 reaches) to 90% of the reaches (20,928), give useful information about the sensitivity of the downstream changes in loads when significant changes occur in the pollutant sources in a subset of headwater reaches.

Finally, to quantify the downstream effects of loss processes (e.g., denitrification) in headwater streams and reservoirs, we set the decay rate to zero in headwater streams and reservoirs and track the change in the nitrogen loads in first- and all higher-order streams. For each stream-order class, we compute the mean of the percentage changes and the standard deviation among all reaches, with the latter metric indicating the spatial variability among streams of the same order. The adjustment to the decay rate in these simulations is identical to setting the water travel time (or areal hydraulic load for reservoirs) to zero because both impart identical effects in the decay functions given in Equations (2) and (3).

Results of the Model Estimation

The parameter coefficients and model performance statistics are given in Table 2. The model explains 95% of the spatial variability in log-transformed mean-annual total nitrogen loads (i.e., $R^2 = 0.95$). All model coefficients are statistically significant for $\alpha = 0.10$. The prediction accuracy is ±44% for individual reaches, based on the RMSE of the model for one standard deviation variability. Model predictions of nitrogen yields from predominantly forested, cultivated, and developed urban and suburban catchments compare favorably with those reported in the literature for similar land uses (e.g., Beaulac and Reckhow, 1982). For example, predicted yields from forested catchments (median = 2.7 kg/ha/year; interquartile range from 1.8 to 3.4 kg/ha/year) are 20-25% of the predicted yields for cultivated and developed catchments.

The inclusion of literature nitrogen loss rates in the model estimation provides sufficient statistical power to quantify nitrogen loss as a continuous function of the hydraulic conditions in streams and reservoirs in the northeastern United States (Table 2; Figure 4). We find that the continuous stream loss function gives first-order nitrogen loss rates (Figure 4a) that decline with increases in mean water depth (also mean streamflow). This inverse relation is consistent with that reported for other SPARROW nitrogen models (Alexander *et al.*, 2002a; Schwarz *et al.*, 2006) and is also consistent with the widely held scientific notion that water-column nitrogen loss rates generally decline with increasing water depth (e.g., Stream Solute Workshop, 1990; Peterson *et al.*, 2001; Thomas *et al.*, 2001). The rates estimated here for small streams (depths < 0.39 m) are generally consistent with the single loss rate (0.82 day^{-1}) that was estimated according to a discrete loss function in the previous northeastern SPARROW model (Moore *et al.*, 2004). The first-order rates from the continuous loss function (Figure 4a) are centered on the previously estimated constant rate and provide a reasonable description of the dimensions of the inverse relation over these smaller stream sizes. Although the literature data include relatively few observations of nitrogen loss in larger streams (those with depths greater then 0.39 m; Figure 4a), these observations provide important complementary information for estimating nitrogen losses in streams of the Northeast. Attempts to estimate the model with a continuous instream loss function (i.e., Equation (2)) using only the load data from the 65 monitoring sites were unsuccessful as the model failed to converge.

The estimated nitrogen loss coefficient (i.e., mass-transfer rate) for reservoirs (Table 2) is similar to that estimated for the lake data alone (Figure 4b) – i.e., 9.9 m/year compared with 10.4 m/year, respectively – and is about five times larger than that estimated in the previous northeastern SPARROW model (Moore *et al.*, 2004; i.e., 9.9 m/year compared with 1.9 m/year, respectively). Based on a re-estimation of the coefficients in this previous model using a fixed reservoir mass-transfer coefficient value of 9.9 m/year, we find that a difference in the reservoir loss rate coefficient of this magnitude has relatively little effect on the estimates of the other coefficients in the earlier model. The general insensitivity of the model coefficients to such changes is consistent with suggestions by Moore *et al.* (2004) that the monitoring sites may be poorly located in relation to the

TABLE 2. Estimated Coefficients for the SPARROW Total Nitrogen Models for Northeastern U.S. NHD Streams.

	Estimated model*		
Predictor Variables	**Coefficient**	**Units**	**Standard Eror**
Sources			
Municipal wastewater	1.42	Dimensionless	0.39
Atmospheric deposition	0.412	Dimensionless	0.058
Cultivated agricultural land	678	$\text{kg/km}^2\text{/year}$	260
Developed urban and suburban land	726	$\text{kg/km}^2\text{/year}$	232
Land-to-water delivery			
Soil permeability	0.387	Dimensionless	0.154
Instream loss			
θ_{S1}	0.0513	$\text{m}^{-1}\ \text{day}^{-1}$	0.0084
θ_{S2}	-1.319	dimensionless	0.076
Reservoir/lake loss	9.9	m/year	1.6
Number of observations	113		
R^2	0.95		
RMSE (root mean square error in %)	44.2		

*The model as defined by Equations (1)-(5) is estimated using load data for the 65 stream monitoring sites and additional literature measurements of the nitrogen loss rate in streams ($N = 12$) and lakes ($N = 36$) in New Zealand, North America, and Europe (data are from Seitzinger *et al.*, 2002; Böhlke *et al.*, 2004; Mulholland *et al.*, 2004).

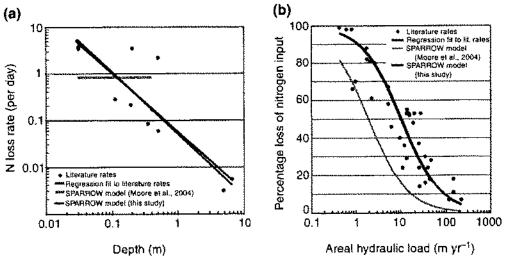

FIGURE 4. Nitrogen Loss in Streams, Lakes, and Reservoirs: (a) Streams in Relation to Mean Water Depth and (b) Reservoirs and Lakes in Relation to the Areal Hydraulic Load. The literature rates are for streams and lakes in North America, Europe, and New Zealand (Seitzinger *et al.*, 2002; Böhlke *et al.*, 2004; Mulholland *et al.*, 2004). The literature rates in (a) were originally reported as a percentage of nitrogen inputs in Seitzinger *et al.* (2002) and are converted to first-order rates here using the corresponding measurements of the water time-of-travel. The regression fit for the literature rates in (a) is obtained from a log-linear regression: $k = 0.0573d^{-1.246}$, where k is the first-order rate coefficient and d is the mean water depth; $R^2 = 0.770$. The regression fit for the literature rates for lakes in (b) is obtained from a nonlinear regression: $N = 1 - [1/(1 + 10.4q^{-1})]$, where N is the fractional nitrogen loss and q is the areal hydraulic load; $R^2 = 0.757$; the estimates are virtually identical to those estimated in the SPARROW model in this study.

reservoirs in the northeastern catchments. However, relatively small rates of nitrogen loss in reservoirs are generally consistent with previous SPARROW models applied in the United States (Smith *et al.*, 1997) and New Zealand (Alexander *et al.*, 2002a).

Other comparisons with the previous northeastern model (Moore *et al.*, 2004) indicate that the model estimated here gives an equally plausible description of nitrogen sources and transport in the northeastern catchments and streams. Although the estimated model yields a slightly higher model error (RMSE = 44.2%) as compared with that for the previous model (RMSE = 40.4%), the changes in the mean estimates of the model coefficients are within the measures of uncertainty as expressed by the standard errors of the coefficients. Differences in the quantities of nitrogen delivered to streams from the various sources are relatively small; the model reported here (Table 2) indicates that the contributions from municipal wastewater sources are about 25% higher than estimated in the previous model, whereas the nitrogen contributions from cultivated and developed urban/suburban lands are about 25% lower. Predictions of nitrogen yield for about 6,600 catchments with predominantly cultivated, developed urban/suburban, or forested land uses differ by less than 25% from the model predictions generated by the previous model.

The Supply and Delivery of Nitrogen and Water to Streams

Based on comparisons of model predictions of flow and the nitrogen loads for the incremental drainages of NHD streams of varying sizes (as defined by Horton-Strahler class; Figure 5), headwaters catchments, in aggregate, account for nearly one-half of the total nitrogen mass supplied to all streams – i.e., headwaters account for 45% of the total nitrogen mass or load that is delivered to all stream reaches from the incremental drainage areas of reaches in the northeastern NHD river network (Figure 5a). By comparison, second- and higher-order streams account for less than 20% of the total nitrogen load that is delivered to all streams. This percentage declines progressively (as does the drainage area; Figure 5b) with increases in stream order.

The nitrogen yields (i.e., loads per unit drainage area) from the incremental drainages (Figure 5b) of headwater streams (mean = 5.5 kg/ha/year) are among the smallest among all stream orders. Atmospheric deposition is the largest source of nitrogen in headwater catchments, accounting for nearly 70% of the total incremental load delivered to headwater streams, with cultivated land and urban/suburban sources accounting for about 27% of the incremental load (see Figure 5c). Most headwater catchments where atmospheric deposition is high are predominantly forested; more than 50% of the headwater catchments have more than 85% forested land area. Cultivated and urban/suburban lands account for more than 10% of the land area in about 75% of the headwater streams. The nitrogen yields increase progressively with stream order (Figure 5b), reflecting the increase in municipal wastewater discharges associated with increases in population in the vicinity of the higher-order streams (see Figure 5c). The large increase in yield in stream order 6 (Figure 5b)

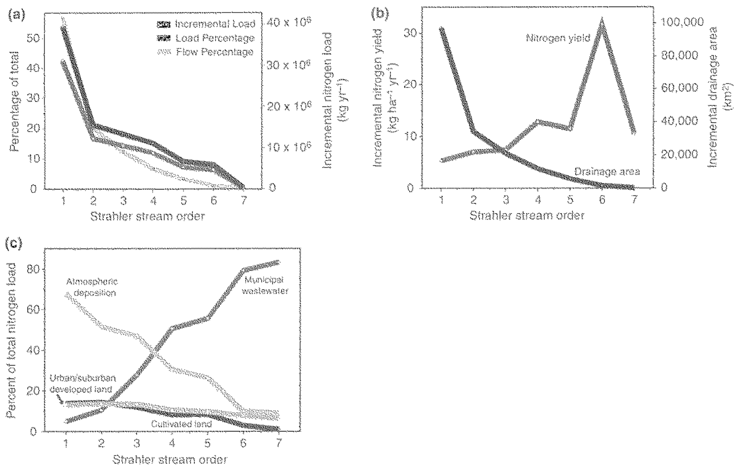

FIGURE 5. Mean-Annual Streamflow and Total Nitrogen Loads, Yields, and Sources for Streams of the Northeastern United States in Relation to Strahler Stream-Order Class: (a) Load From the Incremental Reach Watersheds and the Load and Flow, Expressed as a Percentage of the Sum of the Incremental Load and Flow in Streams of All Orders; (b) Yield and Drainage Area of the Incremental Reach Watersheds; (c) Sources of the Nitrogen Loads, Expressed as a Percentage of the Sum of the Incremental Load in Streams of the Same Order.

includes incoming loads to the lower Connecticut River, where major municipal wastewater discharges occur; note that the percentage of the total incremental load attributable to wastewater discharges increases from 50% in stream order 5 to nearly 80% in stream order 6. Overall, these results indicate that, although the nitrogen yields in headwater streams are generally the smallest among all stream orders (Figure 5b), collectively, the total loads of nitrogen leaving headwater reaches are similar in size to the sum of all loads that originate in the incremental watersheds of higher-order streams.

The mean-annual flow contributions from the incremental drainage areas of NHD reaches (Figure 5a) indicate that first-order streams account for approximately 60% of the total volume of mean-annual flow that is contributed to all northeastern streams. Similar to that observed for other stream properties (e.g., nitrogen load, drainage area), the flow contributions that originate in the incremental watersheds of higher-order streams, expressed as a percentage of the total flow volume in all streams, are relatively small and decline monotonically with increases in stream order, from about 20% for second-order streams to less than 1% for sixth- and seventh-order streams.

Downstream Influences of Headwaters

The results of the model simulations (Figures 6 and 7) indicate a demonstrable effect of the nitrogen sources and flow in headwater catchments on the mean-annual nitrogen and flow conditions in downstream reaches. The percentage of the mean-annual nitrogen load in reaches that is contributed from headwater streams steadily declines with increases in stream order through the sixth-order streams (Figure 6a). We found that second-order streams receive approximately 65% of their nitrogen loads from headwater streams. This percentage contribution of headwater streams ranges from 43% to 87% of the nitrogen loads in second-order streams, based on the two-thirds of the streams that lie within a one standard deviation range in this stream-size class. The lowest contribution of headwater streams to nitrogen loads is about 40% as observed in sixth-order streams. The higher fraction of headwater nitrogen contributions in streams of order 7 as compared with order 6 reflect differences in the load response and potentially the network structure of two independent river basins, the Connecticut and Penobscot (we executed separate simulations for these drai-

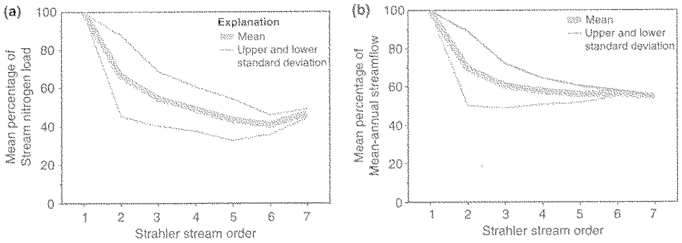

FIGURE 6. The Percentage of the Mean-Annual Nitrogen Load and Streamflow in Streams of the Northeastern United States That Originates in Headwater Catchments: (a) Nitrogen; (b) Streamflow. The estimates are obtained in model simulations by setting the total nitrogen source loadings or streamflow to zero in 23,253 headwater (Strahler order 1) catchments and quantifying the resulting percentage change in the downstream nitrogen loads or flow. The upper and lower standard deviation lines reflect the range of variability (associated with one standard deviation) observed in reaches in the estimated percentage reduction in nitrogen load.

nages and found monotonically decreasing headwater contributions with increasing stream order in each basin that are similar to those shown in Figure 6a for stream orders 1-6).

We find that the percentage of the mean-annual flow in network streams that originates from headwater catchments exhibits a monotonic decline from headwaters to high-order streams similar to that found for nitrogen loads, but is somewhat larger in magnitude than observed for the nitrogen loads (Figure 6b). Headwater catchments contribute approximately 70% of the water volume in second-order streams. Moreover, the flow contributions of headwater catchments to the mean water volume in downstream reaches decline only marginally to about 55% in fourth- and higher-order streams.

The large contributions of headwater nitrogen sources and flow volumes to mean-annual nitrogen loads and flow in streams of all sizes are generally consistent with the high density of headwater streams and the high frequency of their connections to the channels of all higher-order streams; these are intrinsic properties of dendritic river networks. The proportion of all lower-order streams that are tributary to streams of a given Strahler order conforms to fundamental scaling properties defined according to Tokunaga's Law (e.g., see discussion in Dodds and Rothman, 2000). According to this law for commonly observed values of network scaling parameters (Tokunaga, 2003), first-order streams represent the single, most prevalent Horton-Strahler stream-order class with high frequencies of tributary connections to all higher-order streams within river networks. Considering all of the lower-order tributaries to higher-order streams in a network, the percentage of lower-order streams that are theoretically classified as first-order declines with an increase in stream order, but levels off to about 50% (see Table 3). These percentages of first-order tributary connections to higher-order streams are generally similar for the northeastern NHD river network. Therefore, first-order streams are the most frequently occurring tributary to all higher-order streams and represent the origin of a major fraction of the water and nitrogen loadings in streams of all sizes within the northeastern United States.

Refinements to the model simulations to assess the downstream effects of changes in nitrogen sources in a subset of the headwater catchments (Figure 7) provide insight into the magnitude of the water-quality effects in cases where pollutant sources and land use undergo significant changes in a subset of headwater streams. We find that the mean percentage of the stream nitrogen load that originates in headwater catchments declines monotonically with increases in Strahler stream order through the sixth-order streams; the mean percentage shows an approximate leveling in magnitude in fourth- and higher-order streams. The rate of decline is generally similar for simulations involving changes in sources in 50% or more of the headwater reaches; a slightly smaller rate of decline is noted in the mean percentage for simulations involving fewer headwater reaches. The results indicate that nitrogen sources in as few as 50% of the headwater catchments account for 20-25% of the nitrogen loadings in fourth- and higher-order streams; sources in as few as 25% of the headwater catchments account for 10-12% of the nitrogen loadings in fourth- and higher-order streams.

A simulation of the downstream effects of nitrogen loss processes in headwater streams and reservoirs (related to denitrification and long-term storage) indi-

TABLE 3. Headwater Tributary Connections to Higher-Order Streams in River Networks.

	Headwater (First-Order) Streams		
	Percentage of All Lower-Order Tributary Reaches Classified as First-Order Streams		
Strahler Stream-Order Class	**Theoretical***	**New England NHD**	**Number of NHD Stream Reaches**
2	100.0	100.0	11,775
3	66.7	46.5	5,019
4	57.1	54.3	2,527
5	53.3	57.7	1,181
6	51.6	53.5	497
7	50.8	51.1	45

*The estimates are based on Tokunaga's law for describing the average number of streams of a given order that are tributaries to higher-order streams (Dodds and Rothman, 2000). For common values of the network scaling parameters (Tokunaga, 2003), the average number of first-order tributaries to higher-order streams of order υ is computed as $2^{\upsilon-1}$. In the table, the average number of first-order tributaries to a specified stream order is expressed as a percentage of the total number of all lower-order connecting tributaries for that stream order.

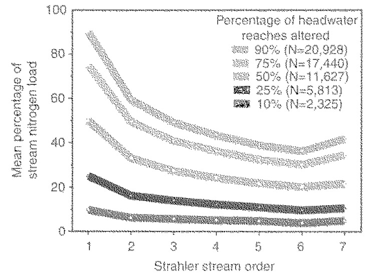

FIGURE 7. The Mean Percentage of the Stream Nitrogen Load in National Hydrography Dataset Reaches Originating From Randomly Selected Subsets of the Headwater Catchments in Relation to Strahler Stream-Order Class. The estimates are obtained in model simulations by setting the total nitrogen source loadings to zero in a randomly selected set of headwater catchments, ranging in number from 2,325 (10% of the total reaches of 23,253) to 20,928 reaches (90% of the total), and quantifying the resulting percentage change in the downstream nitrogen loads.

cates that nitrogen losses in headwaters reduce the nitrogen loads by about 8% in first-order (headwater) streams (standard deviation = ~0-30%), 5% in second-order streams (standard deviation = <1-12%), and about 3-4% in fourth- and higher-order streams. These estimates are calculated as the change in simulated load expressed as a percentage of the original decayed load. The reported changes in load reflect the integrated effects of instream biochemical processing (e.g., denitrification) and water travel times within stream reaches (see Table 1) on the rates of stream nitrogen loss (note that the nitrogen delivered to headwater stream channels from point- or land-based sources is assumed to enter, on average, the midpoint of total channel length of the headwater reach and is therefore subjected to only half of the water time of travel). The large variability in nitrogen loss in headwater streams (i.e., ~0-30%) reflects differences among first-order reaches in the mean water depth and water travel time. Although nitrogen losses in headwaters streams cause relatively small changes in the nitrogen loads in higher-order streams on average, the downstream change in nitrogen loads is actually large relative to the change in headwater loads – i.e., the downstream relative changes in load range from 40% to 60% of the relative change observed in the headwater nitrogen loads.

Uncertainties and Research Needs

Headwater streams are operationally defined in our assessment as Horton-Strahler first-order perennial streams, based on the 1:100,000-scale NHD river network. The Horton-Strahler classification of NHD streams gives a reasonable approximation of headwater locations in relation to those of higher-order streams within the larger drainage network. This definition is based on fundamental principles that describe the hierarchy of the spatial organization of various topographic, hydrologic, and geometric properties of river networks. Comparisons of the Horton-Strahler classification of NHD streams with classifications for more finely resolved 1:24,000-scale streams (Andrews *et al.*, 2002) suggest that NHD headwater channels may be generally classified as second-order streams at this finer scale. Thus, the first-order headwater streams in our study reflect the flow and nitrogen contributions from many smaller streams, including those from intermittent ephemeral streams.

The use of the Horton-Strahler classification to define headwaters has received some criticism (e.g., Gomi *et al.*, 2002; Whiting and Bradley, 1993) because it does not explicitly include hydrological and biological process-related definitions of transitional upland headwater reaches; these are reach locations where the influence of hillslope processes on water and material flux tends to give way to the fluvial routing processes that dominate in higher-order streams. There are, however, intrinsic ambiguities in defining headwater streams that arise from the dynamic spatial and temporal nature of hydrological and biological processes in low-order streams; this contributes, for example, to the lack of consistent definitions of intermittent and ephemeral headwater streams (Meyer and Wallace, 2001).

Additional studies are needed to investigate the effects on our interpretations of alternative definitions of headwater streams in relation to various hydrological- and biogeochemical-process characteristics. This research will demand the use of more spatially detailed digital topography (e.g., 1:24,000 or finer scales) as well as equally refined watershed data, including data on climatic conditions, point and diffuse contaminant sources, and instream nutrient concentrations, for use as input to regional-scale source-transport models.

Our model analyses assume that mean-annual, instream nitrogen losses can be described as a first-order process, mediated by a loss-rate coefficient, the mean-annual solute travel time within stream channels, and mean water depth (or mean-annual streamflow). The first-order assumption of the loss process is potentially subject to some uncertainties, related to the limiting effects of saturation kinetics on denitrification rates (e.g., Garcia-Ruiz *et al.*, 1998), especially in highly developed watersheds where high nitrate concentrations can occur. Under such conditions, for example, highly developed headwater catchments could have more far reaching downstream effects than under the assumed first-order kinetics of the model. The first-order loss function also reflects the aggregate, net time-averaged effect of the hydraulic and biogeochemical properties of streams of varying size; this function does not isolate the effects of specific properties of the benthic sediment, such as organic carbon and oxygen content.

Although our modeling analysis is well suited to examine the natural and human-related processes that control the downstream transport and fate of the nitrogen over annual or longer time periods, it does not include any explicit assessment of the effects of seasonal or other temporal variability in nitrogen loss and streamflow (e.g., heterotrophic and autotrophic production and respiration) on the transport and downstream fate of nitrogen. These short-term processes are included in dynamic mechanistic models (e.g., HSPF; Bicknell *et al.*, 2001), but these models are rarely used to track the geography of nitrogen losses and the downstream transport and fate of nutrients in large watersheds (e.g., Filoso *et al.*, 2004). One difficulty is that the influence of short-term uptake and cycling processes on the downstream fate of various nitrogen forms is not currently well understood, based on available experimental research (Peterson *et al.*, 2001; Grimm *et al.*, 2003). Considerable progress has been made in measuring nitrogen cycling at the reach and catchment scales in small streams (e.g., Peterson *et al.*, 2001; Hall and Tank, 2003; Mulholland *et al.*, 2004; Royer *et al.*, 2004), but longitudinal studies are needed to quantify the effects of autotrophic and heterotrophic uptake and cycling of nutrients in low-order streams on nutrient conditions in higher-order systems. This includes an improved tracking of the separate fate of organic and inorganic nitrogen in models to enhance understanding of the headwater origins of bio-available nitrogen in downstream waters. Observational data and model improvements are also needed to account for the effects of long ground-water residence times that can delay the delivery of nitrogen from land-based sources to downstream waters (e.g., Böhlke and Denver, 1995; McIsaac *et al.*, 2001).

CONCLUSIONS

Our synthesis of existing watershed research and the modeling assessment of northeastern U.S. streams demonstrate the important role that headwaters play in the supply, transport, and fate of water and nitrogen in river networks. This provides important information for the water-resource community regarding decisions on the regulation and management of headwater streams. The results also provide scientific information that potentially broadens understanding of the extent of Federal CWA jurisdiction in waters of the United States, a topic of continuing importance as indicated by recent U.S. Supreme Court cases. The procedures for establishing Federal jurisdiction that have emerged from these cases stress the need for technical and scientific information about whether a "significant nexus" exists between upland waters and downstream navigable waters and their tributaries. Such a connection could be based on evidence that the use, degradation, or destruction of non-navigable headwaters demonstrably influences the waters covered by the CWA.

The results reported here are consistent with the notion that pollutant sources and hydrological and biogeochemical processes in headwaters are physically and bio-chemically connected to the water-quality conditions in downstream waters of widely varying sizes, including navigable waters and their tributaries. Experimental studies of nitrogen transport in streams and rivers indicate that hydrological processes in headwater catchments influence stream nitrogen conditions by controlling the recharge of subsurface water stores and the flow paths and residence times of water through landscapes. The dynamic coupling of hydrological and biogeochemical processes in upland streams further controls the chemical form, timing, and longitudinal distances of nitrogen and other solute transport to downstream waters. Headwater influences on water-quality conditions in downstream waters are likely facilitated by the high density of headwater streams and their high frequency of tributary linkages to the channels of higher-order streams in river networks. These natural dendritic properties of stream networks play an intrinsic role in the delivery of nitrogen and other pollutants to downstream receiving waters from headwater locations throughout watersheds.

Our application of a refined version of the source-transport model SPARROW illustrates many of these concepts. The results demonstrate the prominent influence of headwaters on the mean-annual flow and nitrogen conditions in streams of all sizes in the northeastern United States. We estimate that headwater catchments contribute a majority (~65%) of the nitrogen mass and water volume (~70%) in second-order streams; these contributions decline only marginally to about 40% and 55%, respectively, in fourth- and higher-order streams. We also find that the downstream effects of headwater pollutant sources of nitrogen are generally very large in absolute terms in comparison to the effects of instream processing and long-term nitrogen storage in headwater streams. Nevertheless, the downstream effects of nitrogen processing and storage within headwater streams are still quite large in relative terms, ranging from about 40% to 60% of the magnitude of the relative effects observed in the headwater reaches. Moreover, because of the larger magnitude of nitrogen loads in downstream waters, the magnitude of the change in loadings related to headwater processes is actually quite large in absolute units of nitrogen mass. Our assessment of the potential downstream effects on nitrogen loads related to significant changes in land use or flows in headwater catchments indicates that the downstream nutrient loads change by approximately 50% of magnitude of the percentage of headwater reaches in which these changes occur. Thus, for example, major changes in nitrogen loads in a subset of 25% of the headwater catchments would be expected to change nitrogen loads by about 10-12% in the waters downstream of these headwaters. In view of the comparatively larger headwater flow contributions to downstream waters, we would anticipate generally larger downstream effects on mean-annual streamflow in response to major changes in the land use (e.g., pervious cover) or channel properties (e.g., channelization, water velocity) in headwater catchments and streams.

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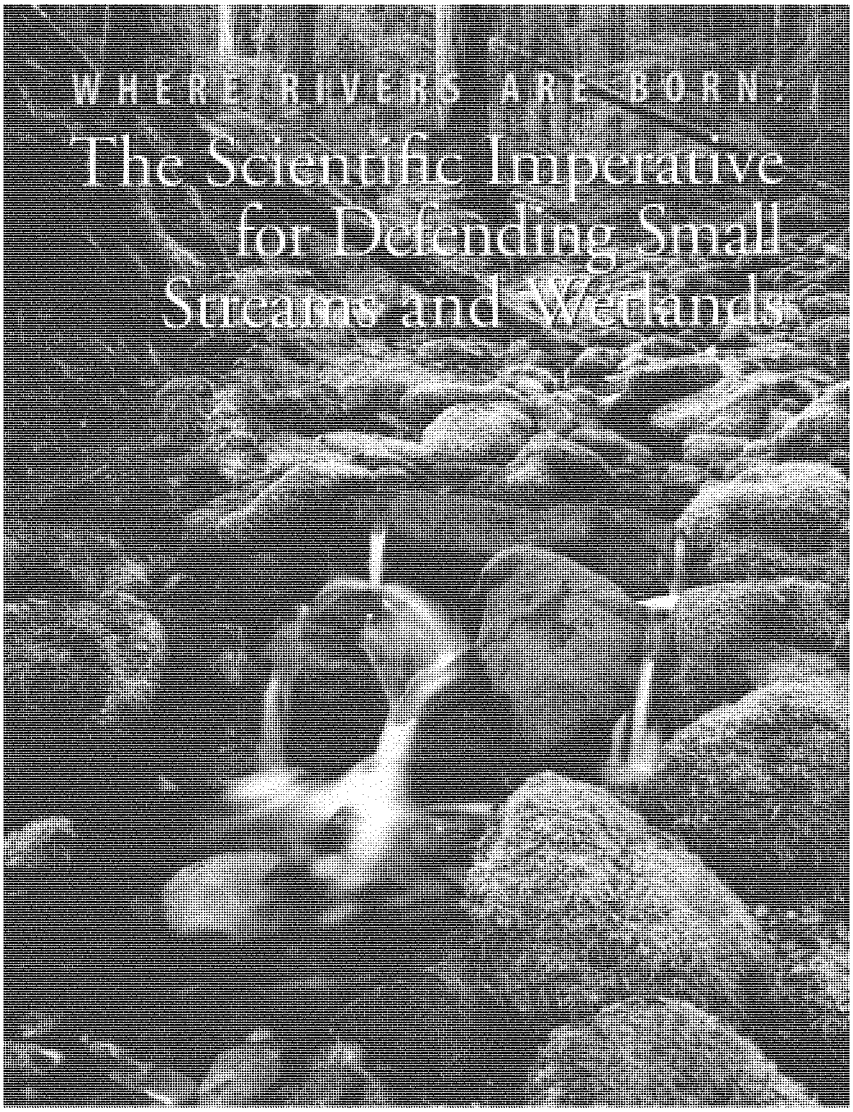

WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands

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WHERE RIVERS ARE BORN:

The Scientific Imperative for Defending Small Streams and Wetlands

EXECUTIVE SUMMARY

Our nation's network of rivers, lakes, and streams originates from a myriad of small streams and wetlands, many so small they do not appear on any map. Yet these headwater streams and wetlands exert critical influences on the character and quality of downstream waters. The natural processes that occur in such headwater systems benefit humans by mitigating flooding, maintaining water quality and quantity, recycling nutrients, and providing habitat for plants and animals. This paper summarizes the scientific basis for understanding that the health and productivity of rivers and lakes depends upon intact small streams and wetlands. Since the initial publication of this document in 2003, scientific support for the importance of small streams and wetlands has only increased. Both new research findings and special issues of peer reviewed scientific journals have further established the connections between headwater streams and wetlands and downstream ecosystems. Selected references are provided at the end of the document.

Historically, federal agencies, in their regulations, have interpreted the protections of the Clean Water Act to broadly cover waters of the United States, including many small streams and wetlands. Despite this, many of these ecosystems have been destroyed by agriculture, mining, development, and other human activities. Since 2001, court rulings and administrative actions have called into question the extent to which small streams and wetlands remain under the protection of the Clean Water Act. Federal agencies, Congress, and the Supreme Court have all weighed in on this issue. Most recently, the Supreme Court issued a confusing and fractured opinion that leaves small streams and wetlands vulnerable to pollution and destruction.

We know from local/regional studies that small, or headwater, streams make up at least 80 percent of the nation's stream network. However, scientists' abilities to extend these local and regional studies to provide a national perspective are hindered by the absence of a comprehensive database that catalogs the full extent of streams in the United States. The topographic maps most commonly used to trace stream networks do not show most of the nation's headwater streams and wetlands. Thus, such maps do not provide detailed enough information to serve as a basis for stream protection and management.

Scientists often refer to the benefits humans receive from the natural functioning of ecosystems as ecosystem services. The special physical and biological characteristics of intact small streams and wetlands provide natural flood control, recharge groundwater, trap sediments and pollution from fertilizers, recycle nutrients, create and maintain biological diversity, and sustain the biological productivity of downstream rivers, lakes, and estuaries. These ecosystem services are provided by

seasonal as well as perennial streams and wetlands. Even when such systems have no visible overland connections to the stream network, small streams and wetlands are usually linked to the larger network through groundwater.

Small streams and wetlands offer an enormous array of habitats for plant, animal, and microbial life. Such small freshwater systems provide shelter, food, protection from predators, spawning sites and nursery areas, and travel corridors through the landscape. Many species depend on small streams and wetlands at some point in their life history. A recent literature review documents the significant contribution of headwater streams to biodiversity of entire river networks, showing that small headwater streams that do not appear on most maps support over 290 taxa, some of which are unique to headwaters. As an example, headwater streams are vital for maintaining many of America's fish species, including trout and salmon. Both perennial and seasonal streams and wetlands provide valuable habitat. Headwater streams and wetlands also provide a rich resource base that contributes to the productivity of both local food webs and those farther downstream. However, the unique and diverse biota of headwater systems is increasingly imperiled. Human-induced changes to such waters, including filling streams and wetlands, water pollution, and the introduction of exotic species can diminish the biological diversity of such small freshwater systems, thereby also affecting downstream rivers and streams.

Because small streams and wetlands are the source of the nation's fresh waters, changes that degrade these headwater systems affect streams, lakes, and rivers downstream. Land-use changes in the vicinity of small streams and wetlands can impair the natural functions of such headwater systems. Changes in surrounding vegetation, development that paves and hardens soil surfaces, and the total elimination of some small streams reduces the amount of rainwater, runoff, and snowmelt the stream network can absorb before flooding. The increased volume of water in small streams scours stream channels, changing them in a way that promotes further flooding. Such altered channels have bigger and more frequent floods. The altered channels are also less effective at recharging groundwater, trapping sediment, and recycling nutrients. As a result, downstream lakes and rivers have poorer water quality, less reliable water flows, and less diverse aquatic life. Algal blooms and fish kills can become more common, causing problems for commercial and sport fisheries. Recreational uses may be compromised. In addition, the excess sediment can be costly, requiring additional dredging to clear navigational channels and harbors and increasing water filtration costs for municipalities and industry.

The natural processes that occur in small streams and wetlands provide Americans with a host of benefits, including flood control, adequate high-quality water, and habitat for a variety of plants and animals. Scientific research shows that healthy headwater systems are critical to the healthy functioning of downstream streams, rivers, lakes, and estuaries. To provide the ecosystem services that sustain the health of our nation's waters, the hydrological, geological, and biological characteristics of small streams and wetlands require protection.

Introduction

Our nation's rivers, from the Shenandoah to the Sacramento, owe their very existence to the seemingly insignificant rivulets and seeps that scientists call headwater streams. Although 19th century explorers often searched for the headwaters of rivers, the birthplace of most rivers cannot be pinpointed. The origins of rivers are many anonymous tiny rills that can be straddled by a 10-year-old child, and no one trickle can reasonably be said to be "the" start of that river. Rather, rivers arise from a network of streamlets and wetlands whose waters join together above and below ground as they flow downstream. As other tributaries join them, creeks grow larger, eventually earning the title "river." The character of any river is shaped by the quality and type of the numerous tributaries that flow into it. Each of the tributaries is, in turn, the creation of the upstream waters that joined to form it.

The ultimate sources of a river often appear insignificant. They could be a drizzle of snowmelt that runs down a mountainside crease, a small spring-fed pond, or a depression in the ground that fills with water after every rain and overflows into the creek below. Such water sources, which scientists refer to as headwater streams and wetlands, are often unnamed and rarely appear on maps. Yet the health of these small streams and wetlands is critical to the health of the entire river network. The rivers and lakes downstream from degraded headwater streams and wetlands may have less consistent flow, nuisance algal growth, more frequent and/or higher floods, poorer water quality, and less diverse flora and fauna.

Historically, federal agencies, in their regulations, have interpreted the protections of the Clean Water Act to cover all the waters of the United States, including small streams and wetlands. More recently, federal agencies and the courts have examined whether such streams and wetlands merit protection. In January, 2003, the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers announced an "advance notice of proposed rulemaking" to solicit public comments on whether and how to exclude "isolated," intrastate, and non-navigable waters from the scope of the Clean Water Act. Many small streams and wetlands, including headwater streams, could fall into one or more of those categories. While the proposed rulemaking was withdrawn, the agencies meanwhile instructed their field staff not to enforce the law to protect such waters, sometimes requiring case-by-case approval from agency headquarters before enforcing the Act. The result of this policy guidance is that thousands of our nation's waters have been denied protections under the Clean Water Act.

More recently, the Supreme Court issued a splintered decision in two cases (*Rapanos* and *Carabell*) about the scope of the Clean Water Act that leaves small streams and wetlands vulnerable to further loss of protections. Although there is no majority support for diminishing the Clean Water Act's application to wetlands and streams, the Court's ruling creates additional uncertainty as to which waters remain protected. The ruling places a burden on the EPA and the Corps of Engineers to show that upstream waters have a "significant nexus" to downstream waters. The "case-by-case" analysis required creates extra layers of work to prove what we already know scientifically: water flows downstream and bodies of water are integrally connected with each other. There is great concern that this decision will lead to more confusion and legal challenges and a loss of protection for many of our nation's waters.

Small streams and wetlands provide crucial linkages between aquatic and terrestrial ecosystems and also between upstream watersheds and tributaries and the downstream rivers and lakes. Since the initial publication of this document in 2003, scientific research has continued to bolster the significance of these connections. Based on the most recent research, this paper summarizes the scientific basis of understanding how small streams and wetlands mitigate flooding, maintain water quality and quantity, recycle nutrients, create habitat for plants and animals, and provide other benefits.

> *"The River itself has no beginning or end. In its beginning, it is not yet the River; in its end, it is no longer the River. What we call the headwaters is only a selection from among the innumerable sources which flow together to compose it. At what point in its course does the Mississippi become what the Mississippi means?"*
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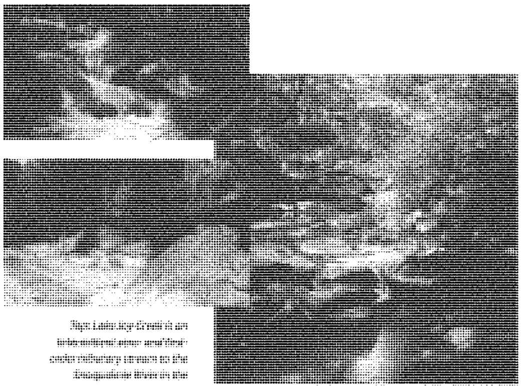
> –T.S. Eliot



Top: Lake Joy Creek is an intermittent zero- and first-order tributary stream to the Snoqualmie River in the Puget Sound area of Washington. Photo courtesy of Washington Trout

Center: A primary headwater stream in arid Cienega Creek Preserve, Pima County. Photo courtesy of Arizona Game and Fish Division

Right: A primary headwater stream in Athens County, Ohio. Photo courtesy of Ohio EPA

Bottom: Diagram of stream orders within a stream system. Image created by Sierra Club, based on EPA graphic.

Human Beings Depend on Functioning Headwater Stream Systems

Human civilizations and economies are ultimately based on the products and processes of the natural world. While frequently hidden from view, some of the processes integral to the functioning of ecosystems - such as the purification of water and the processing of waste - are crucial to human well-being. Scientists often refer to the benefits humans receive from the functioning of natural ecosystems as *ecosystem services*.

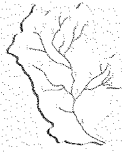
The natural processes that occur in intact headwater streams and wetlands affect the quantity and quality of water and the timing of water availability in rivers, lakes, estuaries, and groundwater. For example, the upper reaches of stream networks are important for storing water, recharging groundwater, and reducing the intensity and frequency of floods. Stream and wetland ecosystems also process natural and human sources of nutrients, such as those found in leaves that fall into streams and those that may flow into creeks from agricultural fields. Some of this processing turns the nutrients into more biologically useful forms. Other aspects of the processing stores nutrients, thereby allowing their slow and steady release and preventing the kind of short-term glut of nutrients that can cause algal blooms in downstream rivers or lakes.

The Extent of U.S. Headwater Streams is Underestimated

For many people, *headwater stream* brings to mind a small, clear, icy-cold, heavily-shaded stream that tumbles down a steep, boulder-filled channel. Indeed, there are thousands of miles of such shaded, mountainous headwater streams in the United States. But the term "headwater" encompasses many other types of small streams. Headwaters can

TYPES OF STREAMS

Any one river typically has several different types of sources: perennial streams that flow year-round; *intermittent* streams that flow several months during the year, such as streams that come from snowmelt; and *ephemeral* streams that flow at the surface only periodically, usually in response to a specific rainstorm. All these types of streams can be the *headwaters* of a river.



One way scientists classify streams is the *stream order* system, which assigns streams a number depending upon their location in the network's branching pattern. The term *zero-order stream* refers to swales: hollows that lack distinct stream banks but still serve as important conduits of water, sediment, nutrients, and other materials during rainstorms and snowmelt. Such zero-order streams are integral parts of stream networks. *First-order streams* are the smallest distinct channels. The rivulet of water that flows from a hillside spring and forms a channel is a *first-order stream*. *Second-order streams* are formed when two first-order channels combine, *third-order streams* are formed by the combination of two second-order streams, and so on.

The term *headwaters* refers to the smallest streams in the network. Scientists often use the term headwaters to refer to zero-, first-, and second-order streams. Easily half of the total length of the channels in a stream network can be first-order streams. Such small headwater streams can join a river system at any point along the network. So, a fourth-order stream resulting from the upstream merger of many first-, second-, and third-order streams may flow through a forest and be joined by another first-order stream that meanders out of a nearby marshy meadow.

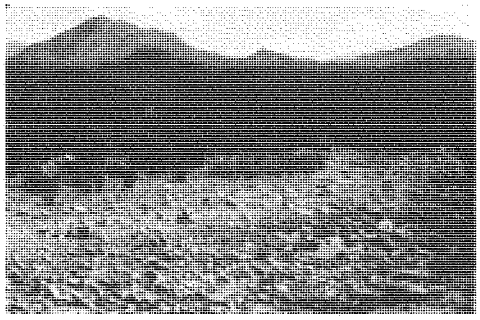
Sometimes resource managers define a stream based on the size of its watershed, the land area that drains into the stream. For example, Ohio's EPA defines headwater streams as those that drain an area 20 square miles or smaller. Such a definition includes first-, second-, and often third-order streams. Other managers suggest that headwater systems can be defined as those having watersheds of less than one square kilometer, a definition that would generally include only first- and second-order streams. For the purposes of this paper, we consider zero-, first-, and second-order streams as headwaters.

be intermittent streams that flow briefly when snow melts or after rain, but shrink in dry times to become individual pools filled with water. Desert headwater streams can arise from a spring and run above ground only a few hundred yards before disappearing into the sand. Other spring-fed headwaters contain clear water with steady temperature and flow. Yet other headwaters originate in marshy meadows filled with sluggish tea-colored water.

No comprehensive study has been conducted to catalog the full extent of streams in the United States. However, on the basis of available maps, scientists have estimated that these smallest streams, called first- and second-order streams, represent about three-quarters of the total length of stream and river channels in the United States. The actual proportion may be much higher because this estimate is based on the stream networks shown on the current U.S. Geological Survey (USGS) topographic maps, which do not show all headwater streams. The absence of a comprehensive survey of U.S. streams hinders our ability to estimate the nationwide importance of these systems; it also indicates our need to better understand them.

Studies including field surveys of stream channel networks have found far more headwater streams than are indicated on USGS topographic maps. For example, an on-the-ground survey of streams in the Chattooga River watershed in the southern Appalachian Mountains found thousands of streams not shown on USGS topographic maps. Approximately one-fifth or less of the actual stream network was shown on the USGS map. The missing streams were the smaller ones - the headwaters and other small streams and wetlands. Similar discrepancies have been found at the state level. For example, Ohio's Environmental Protection Agency found that the state's primary headwater streams, although generally absent from USGS topographic maps, comprise more than 80 percent of the total length of the state's streams. Even when small streams are on the map, they are sometimes misclassified: a large number of Ohio streams shown as intermittent on topographic maps are actually perennial.

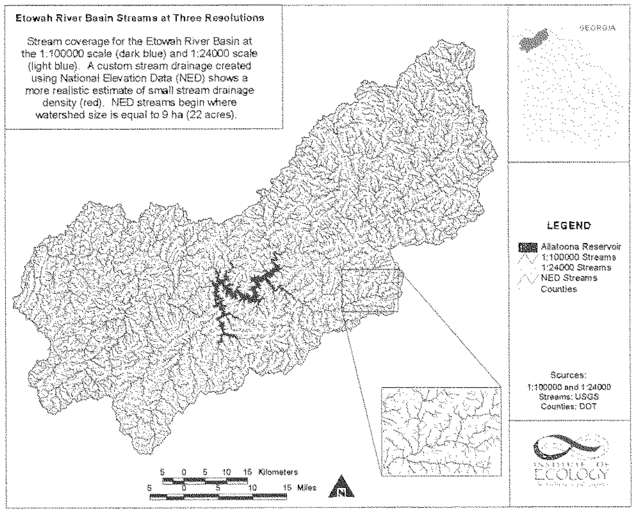
Intact stream networks contain streams that flow year-round and others that flow only part of the time. Compared with the humid-region examples above, stream and river networks in arid regions have a higher proportion of channels that flow intermittently. For example, in Arizona, most of the stream networks - 96 percent by length - are classified as ephemeral or intermittent.



Top: Sycamore Creek in Arizona, an arid stream during a dry period. Photo Courtesy of Nancy Grimm

Center: Sycamore Creek (the same stream) after a winter storm. Photo Courtesy of Nancy Grimm

Thus, regional calculations on the extent of small streams grounded in solid evidence show these streams to be underestimated by existing inventories and maps. But actual measurements are not available for the whole nation. Moreover, the topographic maps commonly used as catalogues of stream networks are not detailed enough to serve as a basis for stream management and protection. The very foundation of our nation's great rivers is a vast network of unknown, unnamed, and underappreciated headwater streams.


Etowah River Basin Streams at Three Resolutions
Stream coverage for the Etowah River Basin at the 1:100000 scale (dark blue) and 1:24000 scale (light blue). A custom stream drainage created using National Elevation Data (NED) shows a more realistic estimate of small stream drainage density (red). NED streams begin where watershed size is equal to 9 ha (22 acres).
GEORGIA
LEGEND
Allatoona Reservoir
1:100000 Streams
1:24000 Streams
NED Streams
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Existing tools for cataloging U.S. waters generally omit a large proportion of the headwaters. In this illustration of Georgia's Etowah River Basin, National Elevation Data details, in red, the approximately 40 percent and 60 percent of headwaters not captured by standard cataloging methods. Diagram courtesy of B.J. Freeman, University of Georgia.

Small Streams Provide Greatest Connection Between Water and Land

Within any intact stream and river network, headwater streams make up most of the total channel length. Therefore, such small streams offer the greatest opportunity for exchange between the water and the terrestrial environment. Small streams link land and water in several ways. As a stream flows, it links upstream and downstream portions of the network. In addition, water flows out of and into a channel during events such as floods and runoff from rainstorms. Floodwaters and runoff carry various materials, ranging from insects and bits of soil to downed trees, between land and a channel. Much exchange between land and water occurs in the transition zone along edges of stream channels, called the *riparian zone.*

Water and land also meet in saturated sediments beneath and beside a river channel, a region which scientists call the *hyporheic zone.* Stream water flows within the stream channel and the hyporheic zone. It is in this zone, where stream water makes its most intimate contact with the channel bed and banks that much of a stream's cleansing action and nutrient processing occurs. This zone is also where groundwater and surface water come into contact.

Ecological processes that occur in hyporheic zones have strong effects on stream water quality. Rivers with extensive hyporheic zones retain and process nutrients efficiently, which has a positive effect on water quality and on the ecology of the riparian zone. Scientific research is illuminating the importance of maintaining connectivity between the channel, hyporheic, and riparian components of river ecosystems. When human actions, such as encasing streams in pipes, sever those connections, the result is poorer water quality and degraded fish habitat downstream.

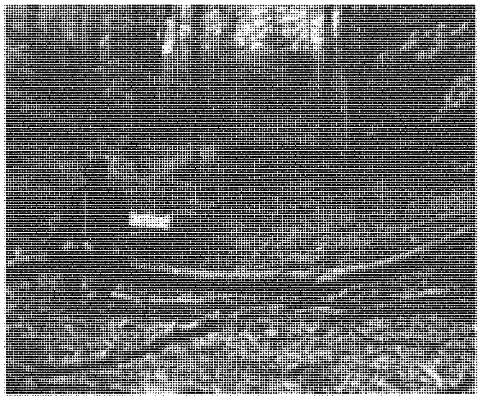
Wetlands Have Hidden Connections to Streams

Like headwater streams, wetlands are also key components of the nation's network of rivers and streams. Many wetlands, such as marshes that border lakes or streams, have obvious connections to surface waters. Other wetlands, however, seem cut off from stream networks - but that appearance is deceiving. Recent research further documents that even wetlands that are referred to as "isolated" are not isolated at all, but have both hydrologic and biologic linkages to regional aquatic systems, and thus are referred to as "geographically isolated" and remain significantly related.

Wetlands are almost always linked to stream networks and other wetlands through groundwater. The hydrologic linkage depends upon the rate at which groundwater moves; water seeping into a gravel aquifer can travel miles in a year, but water seeping into silt or clay may travel only several feet in a year. There are strong biological connections also; many aquatic and semi-aquatic animals, ranging in size from aquatic insects to raccoons, routinely move between land-locked wetlands, streamside wetlands, and stream channels. Animals often use different parts of the aquatic environment at different points in their life cycle, so groundwater connections and food webs link many wetlands to larger waterways. Maintenance of biological diversity in wetlands is dependent on both the terrestrial periphery of the wetland and the corridors that connect geographically isolated wetlands. A recent survey found that 274 at-risk plant and animal species are supported by geographically isolated wetlands.

Evaluating these "hidden" connections that exist between wetlands and regional aquatic ecosystems requires an assessment of groundwater travel time, frequency with which wetlands are connected to surface waters, and home ranges of species that require both wetlands and surface waters.

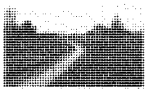
A U.S. Fish and Wildlife Service study of wetlands in 72 areas within the United States found that wetlands without obvious surface connections to waterways are generally small in area, but numerous. All such wetlands are depressions in the ground that hold water, whether from rainwater, snowmelt, or groundwater welling up to the surface. Each region of the United States has unique types of depressional wetlands. Ephemeral wetlands called vernal pools occur in California and the Northeast; the prairie potholes beloved by ducks and other waterfowl dot the Upper Midwest; and Carolina bays, cypress ponds, and grass-sedge marshes occur in the Southeast.



Top: A vernal pool in Massachusett's Ipswich River Basin during the dry phase in summer. Photo courtesy of Vernal Pool Association

Bottom: The same Ipswich River Basin vernal pool inundated by fall precipitation. Photo courtesy of Vernal Pool Association

Small Streams and Wetlands Provide Beneficial Ecosystem Services



A headwater stream channel near Toledo, OH relocated to accommodate development. Photo courtesy of Marshal A. Moser

Natural processes that occur in small streams and wetlands provide humans with a host of benefits, including flood control, maintenance of water quantity and quality, and habitat for a variety of plants and animals. For headwater streams and wetlands to provide ecosystem services that sustain the health of our nation's waters, the hydrological, geological, and biological components of stream networks must be intact.

Small Streams and Wetlands Provide Natural Flood Control

Floods are a natural part of every river. In times past, waters of the Mississippi River routinely overtopped its banks. Floodwaters carried the sediment and nutrients that made the Mississippi Delta's soil particularly suitable for agriculture. But floods can also destroy farms, houses, roads, and bridges.

When small streams and wetlands are in their natural state, they absorb significant amounts of rainwater, runoff, and snowmelt before flooding. However, when a landscape is altered, such as by a landslide or large forest fire or a housing development, the runoff can exceed the absorption capacity of small streams. Moreover, the power of additional water coursing through a channel can change the channel itself. Humans often alter both landscape and stream channels in ways that result in larger and more frequent floods downstream.

A key feature of streams and rivers is their shape. Unlike a concrete drainage ditch, a natural streambed does not present a smooth surface for water flow. Natural streambeds are rough and bumpy in ways that slow the passage of water. Particularly in small narrow streams, friction produced by a stream's gravel bed, rocks, and dams of leaf litter and twigs slows water as it moves downstream. Slower moving water is more likely to seep into a stream's natural water storage system-its bed and banks-and to recharge groundwater. Slower moving water also has less power to erode stream banks and carry sediment and debris downstream.

In watersheds that are not carefully protected against impacts of land development, stream channels often become enlarged and incised from increased runoff. Changed channels send water downstream more quickly, resulting in more flooding. For example, after forests and prairies in Wisconsin watersheds were converted to agricultural fields, the size of floods increased. This change in land use had altered two parts of the river systems' equation: the amount of runoff and shape of the stream channel. Cultivation destroyed the soil's natural air spaces that came from worm burrows and plant roots. The resulting collapse of the soil caused more rainfall to run off into streams instead of soaking into the ground. Additional surface runoff then altered the stream channels, thereby increasing their capacity to carry large volumes of water quickly downstream. These larger volumes flow downstream at much higher velocity, rather than soaking into the streambed.

Urbanization has similar effects; paving previously-vegetated areas leads to greater storm runoff, which changes urban stream channels and ultimately sends water more quickly downstream. Covering the land with impermeable surfaces, such as roofs, roads, and parking lots, can increase by several times the amount of runoff from a rainstorm. If land uses change near headwater streams, effects are felt throughout the stream network. In an urban setting, runoff is channeled into storm sewers, which then rapidly discharge large volumes of water into nearby streams. The additional water causes the stream to pick up speed, because deeper water has less friction with the streambed. The faster the water moves, the less it can soak into the streambed and banks. Faster water also erodes channel banks and beds, changing the shape of a channel. The effect is magnified downstream, because larger rivers receive water from tens, sometimes hundreds, of small headwater basins. When such changes are made near headwater streams, downstream portions of the stream network experience bigger and more frequent flooding.

As regions become more urbanized, humans intentionally alter many natural stream channels by replacing them with storm sewers and other artificial conduits. When larger, smoother conduits are substituted for narrow, rough-bottomed natural stream channels, flood frequency increases downstream. For example, three decades of growth in storm sewers and paved surfaces around Watts Branch Creek, Maryland more than tripled the number of floods and increased average annual flood size by 23 percent.

"ALTERATION OF SMALL STREAMS AND WETLANDS DISRUPTS THE QUANTITY AND AVAILABILITY OF WATER IN A STREAM AND RIVER SYSTEM."

Small Streams and Wetlands Maintain Water Supplies

Headwater systems play a crucial role in ensuring a continual flow of water to downstream freshwater ecosystems, and USGS models show that headwater streams in the northeastern U.S. contribute 55 percent of mean annual water volume to fourth- and higher-order streams and rivers. Water in streams and rivers comes from several sources: water held in the soil, runoff from precipitation, and groundwater. Water moves between the soil, streams and groundwater. Wetlands, even those without any obvious surface connection to streams, are also involved in such exchanges by storing and slowly releasing water into streams and groundwater, where it later resurfaces at springs. Because of these interactions, groundwater can contribute a significant portion of surface flow in streams and rivers; conversely, surface waters can also recharge groundwater. If connections between soil, water, surface waters, and groundwater are disrupted, streams, rivers, and wells can run dry. Two-thirds of Americans obtain their drinking water from a water system that uses surface water. The remaining one-third of the population relies on groundwater sources. The quality and amount of water in both of these sources respond to changes in headwater streams.

USGS estimates that, on average, 40 to 50 percent of water in streams and larger rivers comes from groundwater. In drier regions or during dry seasons, as much as 95 percent of a stream's flow may come from groundwater. Thus, the recharge process that occurs in unaltered headwater streams and wetlands both moderates downstream flooding in times of high water and maintains stream flow during dry seasons.

Headwater streams and wetlands have a particularly important role to play in recharge. These smallest upstream components of a river network have the largest surface area of soil in contact with available water, thereby providing the greatest opportunity for recharge of groundwater. Moreover, water level in headwater streams is often higher than the water table, allowing water to flow through the channel bed and banks into soil and groundwater. Such situations occur when water levels are high, such as during spring snowmelt or rainy seasons. During dry times, the situation in some reaches of the stream network, particularly those downstream, may reverse, with water flowing from the soil and groundwater through the channel banks and bed into the stream. This exchange of water from the soil and groundwater into the stream maintains stream flow. However, if land-use changes increase the amount of precipitation that runs off into a stream rather than soaking into the ground, the recharge process gets short-circuited. This increased volume of stream water flows rapidly downstream rather than infiltrating into soil and groundwater. The consequence is less overall groundwater recharge, which often results in less water in streams during drier seasons.

Therefore, alteration of small streams and wetlands disrupts the quantity and availability of water in a stream and river system. Protecting headwater streams and wetlands is important for maintaining water levels needed to support everything from fish to recreational boating to commercial ship traffic.

Small Streams and Wetlands Trap Excess Sediment

Headwater systems retain sediment. Like the flow of water, movement of sediment occurs throughout a river network. Thus, how a watershed is managed and what kinds of land uses occur there have substantial impact on the amount of sediment delivered to larger rivers downstream. Increased sediment raises water purification costs for municipal and industrial users, requires extensive dredging to maintain navigational channels, and degrades aquatic habitats. Intact headwater streams and wetlands can modulate the amount of sediment transported to downstream ecosystems.

Runoff from rain, snowmelt, and receding floodwaters can wash soil, leaves, and twigs into streams, where the various materials get broken up into smaller particles or settle out. If natural vegetation and soil cover are disturbed by events and activities such as fires, farming, or construction, runoff increases, washing more materials into streams. At the same time, the increased velocity and volume of water in a stream cause erosion within the streambed and banks themselves, contributing additional sediment to the stream system. Moreover, the faster, fuller stream can carry more and larger chunks of sediment further downstream.

"INTACT HEADWATER STREAMS AND WETLANDS CAN MODULATE THE AMOUNT OF SEDIMENT TRANSPORTED TO DOWNSTREAM ECOSYSTEMS."

One study found that land disturbances such as urban construction can, at minimum, double the amount of sediment entering headwater streams from a watershed. A Pennsylvania study showed how, as a 160-acre headwater watershed became more urbanized, channel erosion of a quarter-mile stretch of stream generated 50,000 additional cubic feet of sediment in one year-enough to fill 25 moderate-sized living rooms. In a non-urban watershed of the same size, it would take five years to generate the same amount of sediment. Such studies demonstrate that landscape changes such as urbanization or agriculture, particularly without careful protection of headwater streams and their riparian zones, may cause many times more sediment to travel downstream.

Excess Sediment in Downstream Ecosystems Costs Money

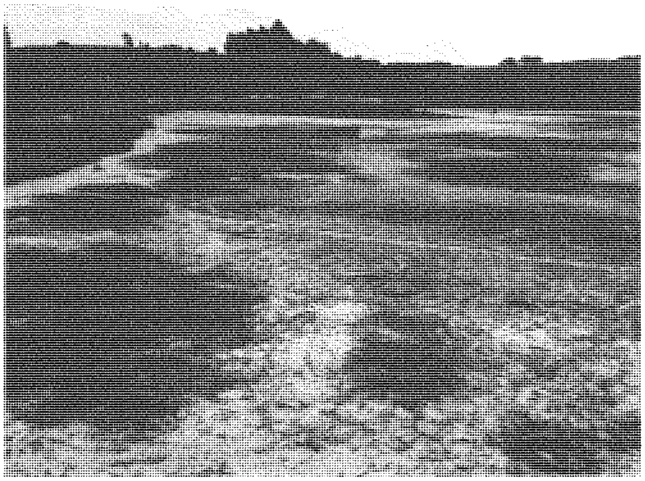
Keeping excess sediment out of downstream rivers and lakes is one ecosystem service intact small streams and wetlands provide. Once sediment moves further downstream, it becomes an expensive problem. Too much sediment can fill up reservoirs and navigation channels, damage commercial and sport fisheries, eliminate recreation spots, harm aquatic habitats and their associated plants and animals, and increase water filtration costs.

Additional sediment damages aquatic ecosystems. Sediment suspended in the water makes it murkier; as a result, underwater plants no longer receive enough light to grow. Fish that depend on visual signals to mate may be less likely to spawn in murky water, thereby reducing fish populations. High levels of sediment suspended in water can even cause fish kills. Even as it settles to the bottom, sediment continues to cause problems because it fills the holes between gravel and stones that some animals call home, smothers small organisms that form the basis of many food webs, and can also smother fish eggs.

Getting rid of sediment is expensive. For example, keeping Baltimore Harbor navigable costs $10 to $11.5 million annually to dredge and dispose of sediment the Patapsco River deposits in the harbor.

Small Streams and Wetlands Retain Sediment

Headwater streams and wetlands typically trap and retain much of the sediment that washes into them. The faster the water travels, the larger the particles it can carry. So, natural obstructions in small streams-rocks, downed logs, or even just a bumpy stream bottom-slow water and cause sediment to settle out of the water column. Wetlands, whether or not they have a surface connection to a nearby stream, are often areas where runoff slows and stops,



Stream networks filter and process everything from leaves and dead insects to runoff from agricultural fields and animal pastures. Without such processing, algal blooms can ruin living conditions for fish and the quality of drinking water. Here, algae overtakes a lake in Iowa. Photo courtesy of Lynn Betts, USDA NRCS

dropping any debris the water may be carrying. Because headwater streams represent 75 percent or more of total stream length in a stream network, such streams and their associated wetlands retain a substantial amount of sediment, preventing it from flowing into larger rivers downstream.

Even ephemeral streams can retain significant amounts of sediment. Such small headwater streams expand and contract in response to heavy rains. During expansion, a stream flows over what was a dry or damp streambed. Most of the water at the leading edge of a growing stream, called the "trickle front," soaks into the streambed and does not carry sediment downstream. In a small watershed near Corvallis, Oregon, researchers found that 60 to 80 percent of sediment generated from forest roads traveled less than 250 feet downstream before settling out in stream pools. Headwater streams can store sediment for long periods of time: research in Oregon's Rock Creek basin found that headwater streams could retain sediment for 114 years.

Natural Cleansing Ability of Small Streams and Wetlands Protects Water Quality

Materials that wash into streams include everything from soil, leaves, and dead insects to runoff from agricultural fields and animal pastures. One of the key ecosystem services that stream networks provide is the filtering and processing of such materials. Healthy aquatic ecosystems can transform natural materials like animal dung and chemicals such as fertilizers into less harmful substances. Small streams and their associated wetlands play a key role in both storing and modifying potential pollutants, ranging from chemical fertilizers to rotting salmon carcasses, in ways that maintain downstream water quality.

Excess Nutrients Cause Problems in Rivers and Lakes

Inorganic nitrogen and phosphorus, the main chemicals in agricultural fertilizers, are essential nutrients not just for plants, but for all living organisms. However, in excess or in the wrong proportions, these chemicals can harm natural systems and humans.

In freshwater ecosystems, eutrophication, the enriching of waters by excess nitrogen and phosphorus, reduces water quality in streams, lakes, estuaries, and other downstream waterbodies. One obvious result is the excessive growth of algae. More algae clouds previously clear streams, such as those favored by trout. In addition to reducing visibility, algal blooms reduce the amount of oxygen dissolved in the water, sometimes to a degree that causes fish kills. Fish are not the only organisms harmed: some of the algae species that grow in eutrophic waters generate tastes and odors or are toxic, a clear problem for stream systems that supply drinking water for municipalities. In addition, increased nitrogen can injure people and animals. Excess nitrogen in the form called nitrate in drinking water has been linked to "blue baby disease" (methemoglobinemia) in infants and also has toxic effects on livestock.

HEADWATER STREAMS TRANSFORM AND STORE EXCESS NUTRIENTS

Headwater streams and associated wetlands both retain and transform excess nutrients, thereby preventing them from traveling downstream. Physical, chemical, and biological processes in headwater streams interact to provide this ecosystem service.

"IF HEADWATER STREAMS AND WETLANDS ARE DEGRADED OR FILLED, MORE FERTILIZER APPLIED TO FARM FIELDS OR LAWNS REACHES LARGER DOWNSTREAM RIVERS."

Compared with larger streams and rivers, small streams, especially shallow ones, have more water in physical contact with a stream channel, and thus nutrient particles are removed from the water column more quickly in small streams than in larger ones. New research on headwater streams has demonstrated that nitrate removed by headwater streams accounts for half of total nitrate removal in entire river basins. Removal of nitrate by headwater streams has reduced nitrogen export from watersheds in New England. The nutrients that are not removed in headwater streams travel far downstream because uptake processes are less efficient in larger systems. Similarly, a study of headwater streams in the Southern Appalachian Mountains found that both phosphorus and the nitrogen-containing compound ammonium traveled less than 65 feet downstream before being removed from the water

In headwater streams and wetlands, more water is in direct contact with the streambed, where most processing takes place. Bacteria, fungi and other microorganisms living on the bottom of a stream consume inorganic nitrogen and phosphorus and convert them into less harmful, more biologically beneficial compounds. A mathematical model based on research in 14 headwater streams throughout the U.S. shows that 64 percent of inorganic nitrogen entering a small stream is retained or transformed within 1,000 yards. The rest of the nitrogen is exported downstream, and models suggest that 40% of the nitrogen in waters downstream originated in headwaters.

Channel shape also plays a role in transforming excess nutrients. Studies in Pennsylvania have shown that when the forest surrounding headwaters is replaced by meadows or lawns, increased sunlight promotes growth of grasses along stream banks. The grasses trap sediments, create sod, and narrow the stream channel to one-third of the original width. Such narrowing reduces the amount of streambed available for microorganisms that process nutrients. As a result, nitrogen and phosphorus travel downstream five to ten times farther, increasing risks of eutrophication.

Streams do not have to flow year-round to make significant contributions to water quality. Fertilizers and other pollutants enter stream systems during storms and other times of high runoff, the same times that ephemeral and intermittent streams are most likely to have water and process nutrients. Federal, state and local programs spend considerable sums of money to reduce non-point source inputs of nutrients because they are a major threat to water quality. One principal federal program, the EPA's 319 cost-share program, awarded more than $1.3 billion between 1990 and 2001 to states and territories for projects to control non-point pollution. Failure to maintain nutrient removal capacity of ephemeral and intermittent streams and wetlands would undermine these efforts.

Wetlands also remove nutrients from surface waters. Several studies of riparian wetlands have found that those associated with the smallest streams to be most effective in removing nutrients from surface waters. For example, headwater wetlands comprise 45 percent of all wetlands able to improve water quality in four Vermont watersheds. Another study found that wetlands associated with first-order streams are responsible for 90 percent of wetland phosphorus removal in eight northeastern watersheds. Such studies demonstrate that riparian wetlands, especially those associated with small streams, protect water quality.

"THE ABILITY OF HEADWATER STREAMS TO TRANSFORM ORGANIC MATTER INTO MORE USABLE FORMS HELPS MAINTAIN HEALTHY DOWNSTREAM ECOSYSTEMS."

Even wetlands that are considered "isolated" are not isolated from a water quality perspective. Recent research has provided additional evidence of rapid removal of nitrate in small, headwater wetlands and concluded that headwater wetlands offer significant water quality benefits. Scientists have detailed the ecological functions and geographical distribution of "isolated" wetlands with an emphasis on their linkages with other aquatic ecosystems. Authors document that these wetlands are not truly isolated and use the term "geographically isolated wetlands" to describe wetlands that are surrounded by terrestrial habitat, but have both hydrologic and biologic linkages to regional aquatic systems that provide clean water benefits downstream.

As land is developed, headwater streams are often filled or channeled into pipes or paved waterways, resulting in fewer and shorter streams. For example, as the Rock Creek watershed in Maryland was urbanized, more than half of the stream channel network was eliminated. In even more dramatic fashion, mining operations in the mountains of central Appalachia have removed mountain tops and filled valleys, wiping out entire headwater stream networks. From 1986 to 1998, more than 900 miles of streams in central Appalachia were buried, more than half of them in West Virginia.

If headwater streams and wetlands are degraded or filled, more fertilizer applied to farm fields or lawns reaches larger downstream rivers. These larger rivers process excess nutrients from fertilizer much more slowly than smaller streams. Losing the nutrient retention capacity of headwater streams would cause downstream waterbodies to contain higher concentrations of nitrogen and phosphorus. A likely consequence of additional nutrients would be the contamination and eutrophication of downstream rivers, lakes, estuaries, and such waters as the Gulf of Mexico.

Natural Recycling in Headwater Systems Sustains Downstream Ecosystems

Recycling organic carbon contained in the bodies of dead plants and animals is a crucial ecosystem service. Ecological processes that transform inorganic carbon into organic carbon and recycle organic carbon are the basis for every food web on the planet. In freshwater ecosystems, much of the recycling happens in small streams and wetlands, where microorganisms transform everything from leaf litter and downed logs to dead salamanders into food for other organisms in the aquatic food web, including mayflies, frogs, and salmon.

Like nitrogen and phosphorus, carbon is essential to life but can be harmful to freshwater ecosystems if it is present in excess or in the wrong chemical form. If all organic material received by headwater streams and wetlands went directly downstream, the glut of decomposing material could deplete oxygen in downstream rivers, thereby damaging and even killing fish and other aquatic life. The ability of headwater streams to transform organic matter into more usable forms helps maintain healthy downstream ecosystems.

Headwater Stream Systems Store and Transform Excess Organic Matter

Intact headwater systems both store and process organic matter in ways that modulate the release of carbon to downstream lakes and rivers. Headwater systems receive large amounts of organic matter, which can be retained and transformed into more palatable forms through decomposition processes. This organic matter is anything of biological origin that falls into, washes into, or dies in a stream. Plant parts, such as leaves, twigs, stems, and larger bits of woody debris are the most common of these items. Another source of organic material is dead stream organisms, such as bits of dead algae and bacteria or bodies of insects and even larger animals. Waste products of plants and animals also add organic carbon to water. Water leaches dissolved organic carbon from organic materials in a stream and watershed like tea from a tea bag.

"HEADWATER STREAMS ARE PROBABLY THE MOST VARIED OF ALL RUNNING-WATER HABITATS."

Much of the organic matter that enters headwater systems remains there instead of continuing downstream. One reason is that the material often enters headwater streams as large pieces, such as leaves and woody debris that are not easily carried downstream. In addition, debris dams that accumulate in headwater streams block the passage of materials. One study found four times more organic matter on the bottoms of headwater streams in forested watersheds than on the bottoms of larger streams.

Another reason material stays in headwater streams is that food webs in small streams and wetlands process organic matter efficiently. Several studies have found that headwater streams are far more efficient at transforming organic matter than larger streams. For example, one study showed that, for a given length of stream, a headwater stream had an eight-fold higher processing efficiency than a fourth-order channel downstream. Microorganisms in headwater stream systems use material such as leaf litter and other decomposing material for food and, in turn, become food for other organisms. For example, fungi that grow on leaf litter become nutritious food for invertebrates that make their homes on the bottom of a stream, including mayflies, stoneflies and caddis flies. These animals provide food for larger animals, including birds such as fly-catchers and fish such as trout.

Headwater Systems Supply Food for Downstream Ecosystems

The organic carbon released by headwater streams provides key food resources for downstream ecosystems. Headwater ecosystems control the form, quality and timing of carbon supply downstream. Although organic matter often enters headwaters in large amounts, such as when leaves fall in autumn or storm runoff carries debris into the stream, those leaves and debris are processed more slowly. As a result, carbon is supplied to downstream food webs more evenly over a longer period of time. Forms of carbon delivered range from dissolved organic carbon that feeds microorganisms to the drifting insects such as mayflies and midges that make ideal fish food. Such insects are the preferred food of fish such as trout, char, and salmon. One study estimated that fishless headwater streams in Alaska export enough drifting insects and other invertebrates to support approximately half of the fish production in downstream waters.

Processed organic matter from headwater streams fuels aquatic food webs from the smallest streams to the ocean. Only about half of all first-order streams drain into second-order streams; the other half feed directly into larger streams or directly into estuaries and oceans, thus delivering their carbon directly to these larger ecosystems. The health and productivity of downstream ecosystems depends on processed organic carbon—ranging from dissolved organic carbon to particles of fungus, and leaf litter to mayflies and stoneflies-delivered by upstream headwater systems.

Headwater Streams Maintain Biological Diversity

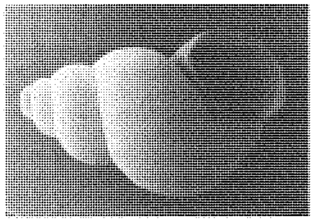
HEADWATER HABITATS ARE DIVERSE

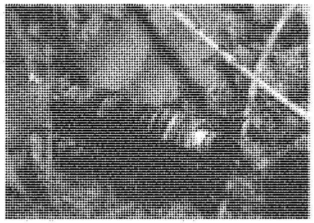
Headwater streams are probably the most varied of all running-water habitats; they range from icy-cold brooks tumbling down steep, boulder-filled channels to outflows from desert springs that trickle along a wash for a short distance before disappearing into the sand. As such, headwater systems offer an enormous array of habitats for plant, animal and microbial life.

This variation is due to regional differences in climate, geology, land use, and biology. For example, streams in limestone or sandy regions have very steady flow regimes compared with those located in impermeable shale or clay soils. Plants or animals found only in certain regions can also lend a distinctive character to headwater streams. Regionally important riparian plants, such as alder and tamarisk, exercise a strong influence on headwater streams. Headwater streams in regions with beavers are vastly different from those in regions without beavers.

Environmental conditions change throughout a stream network. In wet regions, streams grow larger and have wider channels, deeper pools for shelter, and more permanent flow as they move downstream. In arid regions and even humid regions during dry periods, headwater streams may become smaller downstream as water evaporates or soaks into a streambed. Because marked changes in environmental conditions can occur over very short distances, conditions required by a headwater species may exist for as little as 100 yards of stream. Consequently, local populations of a species may extend over just a short distance, particularly in spring-fed headwaters with sharp changes in environmental conditions along the length of a stream.

With this variety of influences, headwater streams present a rich mosaic of habitats, each with its own characteristic community of plants, animals, and microorganisms.

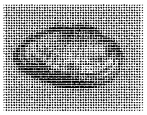




HEADWATER SYSTEMS SUPPORT A DIVERSE ARRAY OF ANIMALS AND PLANTS

Although there has never been a complete inventory of the inhabitants in even a single headwater stream, much less surveys across many types of headwaters, a recent review of existing literature highlights the significant biological connections between headwater streams and downstream ecosystems. The review found that small headwater streams that do not appear on most maps can support over 290 taxa, some of which are unique to headwaters, thus emphasizing the significant contribution of small streams to biodiversity of entire river networks.

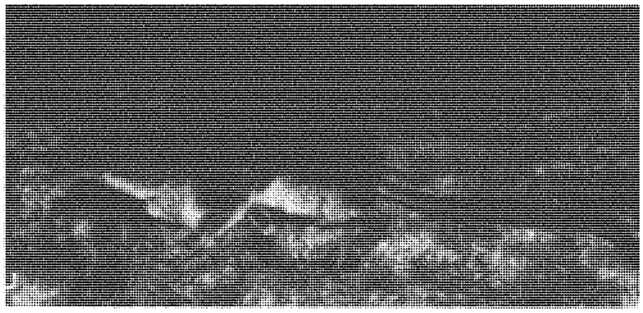
Below: The venustaconcha ellipsiformis, a pearl mussel associated with Midwestern headwaters, is threatened with extinction. Photo courtesy of Kevin Cummings, Illinois Natural History Survey



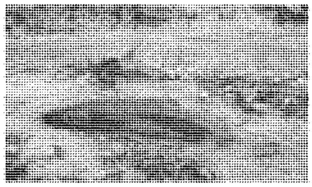
Top left: A hydrobiid snail [Pyrgulopsis robusta] found in the headwaters of the Snake River in Wyoming. Photo courtesy of Dr. Robert Hershler

Center: Caddis flies and other aquatic insects spend their larval stage in streams, feeding on the algae, vegetation and decaying plant matter. The Brachycentris, a caddis fly found in headwater streams of eastern North America, constructs a protective case out of twigs, leaves and other debris. Photo courtesy of David H. Funk

Bottom: American dippers rely on headwater streams for sustenance, walking along stream bottoms and feeding on insect larvae and crustaceans among the rocks of the streambed. This American dipper was photographed at Tanner's Flat, just east of Salt Lake City. Photo courtesy of Pomera M. France

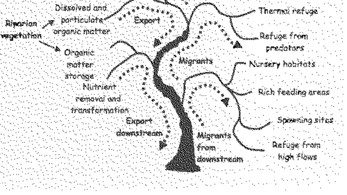


A water shrew (Sorex palustris) in the waters of Oregon's Mt. Hood. Photo courtesy of RB Forbes, Mammal Images Library



A coho salmon migrating up a spring-fed tributary of the Snowqualmie River watershed in Washington's Puget Sound region. Many anadromous fish species spawn in headwater streams that are so small as to be omitted from standard USGS topographical maps. Photo courtesy of Washington Trout.

The species in a typical headwater stream include bacteria, fungi, algae, higher plants, invertebrates, fish, amphibians, birds, and mammals. Headwater streams are rich feeding grounds. Large amounts of leaves and other organic matter that fall or blow into streams, the retention of organic matter in a channel or debris dams, and the high rates of plant and algal growth in unshaded headwaters all supply food sources for animals such as caddis flies, snails, and crustaceans. These animals become food for predators such as fish, salamanders, crayfish, birds, and mammals, which, in turn, become prey for larger animals, including herons, raccoons, and otters. Many widespread species also use headwaters for spawning sites, nursery areas, feeding areas, and travel corridors. Thus, headwater habitats are important to species like otters, flycatchers, and trout, even though these species are not restricted to headwaters. The rich resource base that headwaters provide causes the biotic diversity of headwater streams to contribute to the productivity of both local food webs and those farther downstream.



This figure illustrates the many benefits headwater streams provide to organisms living in downstream ecosystems and the connections between headwater streams and other ecosystems. Illustration courtesy of: Judy Meyer, University of Georgia.

Diversity of headwater systems results in diverse headwater plants and animals. Many of these species are headwater specialists and are most abundant in or restricted to headwaters. For example, water shrews live along small, cool streams, feed on aquatic invertebrates, and spend their entire lives connected to headwater streams. Because different headwaters harbor different species, the number of headwater-dependent species across North America is far greater than the number of species in any one headwater.

Headwater specialists often have small geographic ranges. These species, many of which are imperiled, include: species of minnows, darters, and topminnows in southeastern springs and brooks; aquatic snails in spring-fed headwaters in the Great Basin, the Southeast, Florida, and the Pacific Northwest; crayfish in small streams from Illinois and Oklahoma to Florida; and salamanders and tailed frogs in small streams, springs, and seeps in the Southeast and Pacific Northwest. Two factors contribute to specialists' small ranges: their limited ability to move between headwaters and high diversity of headwater habitats. Unlike mobile animals, such as mammals and birds, fully aquatic animals like fish and most mollusks cannot move from one headwater stream to another. As a result, local evolution may produce different species in adjacent headwater systems. Moreover, environmental conditions often differ greatly between adjacent headwater streams and even within the course of a single stream. For example, in a spring-fed headwater stream in western Pennsylvania, one species of caddis fly inhabits headwaters starting at the spring and going downstream about 200 yards. A different species of caddis fly inhabits the stream after that point.

Animals may use headwater streams for all or part of their lives. Although many fish species live exclusively in headwater systems, others use headwaters only for key parts of their life cycle. For permanent residents and seasonal migrants, headwater streams offer refuge from high flows, extreme temperatures, predators, competitors, and exotic species. Recent research in Oregon has demonstrated that a significant proportion of coho salmon reproduction occurs in intermittent headwater streams, and young salmon use these small streams as refuge during high flow conditions. In other parts of the country, trispot darters, brook trout and rainbow trout spawn in small streams. Young cutthroat trout use shelter formed by streams' debris dams but move onto larger portions of a stream network as they mature. Intermittent streams can offer special protection for young fish, because the small pools that remain in such streams often lack predators. Still other fish species use headwater streams as seasonal feeding areas. These and other fish life cycles clearly demonstrate the linkage between the smallest streams on the landscape, large rivers, and the ocean.

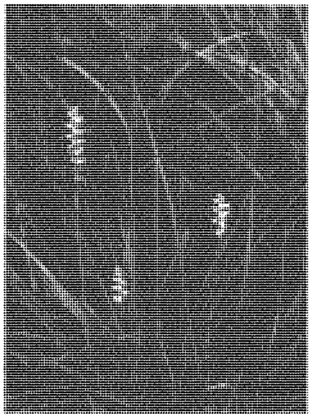
Both permanent and intermittent streams provide valuable habitat for microorganisms, plants, and animals. Generally, biodiversity is higher in permanent streams than in intermittent streams, but intermittent streams often provide habitat for different species. Some species that occur in both types of streams may be more abundant in predator-free intermittent streams. For example, because of the lack of large predatory fish, salamanders and crayfish are sometimes more abundant in fishless intermittent streams rather than those with permanent flow. In contrast, for animals such as brook trout that require steady water temperatures and constant water flow, perennial streams provide better habitat.

A westslope cutthroat trout from Deep Creek, a headwater of the Kettle River. Cutthroat trout spawn in headwaters where the young trout seek shelter amid piles of debris, moving on to larger waters for their adult lives. Photo courtesy of Bill McMillan, Washington Trout

Linkages between Headwater and Streamside Ecosystems Boost Biological Diversity

The movement of plants and animals between headwater and streamside ecosystems boosts biodiversity in both areas. Headwater streams are tightly linked to adjacent riparian ecosystems, the zones along a stream bank. Riparian ecosystems have high species diversity, particularly in arid environments where the stream provides a unique microclimate. Typical riparian vegetation depends upon moist streamside soils. Some plants must have "wet feet," meaning their roots have to stretch into portions of soil that are saturated with water. Seeds of some riparian plants, such as those of cottonwood trees found along rivers in the Southwest, require periodic floods to germinate and take root.

Another link between stream and land is often provided by insects, such as mayflies, that emerge from streams and provide a vital food resource for animals, including birds, spiders, lizards, and bats. For example, insect-eating birds living by a prairie stream in Kansas consume as much as 87 percent of the adult aquatic



Canelo Hills ladies' tresses [Sprianthes delitescens] in a southwestern freshwater marsh known as a cienega. The cienegas of Arizona and New Mexico and Mexico, are the exclusive habitat for this member of the orchid family. Photo courtesy of Jim Rorabaugh, USFWS

insects that emerged from the stream each day. Such exchanges between land and water help maintain animal populations across landscapes. In many landscapes, the network of headwater streams is so dense that it offers a nearly continuous system of interconnected habitat for the movement of mobile species that rely on streams and riparian areas.

The Cleistes, a member of the orchid family, is found in pocosin wetlands of North Carolina. Photo courtesy of Vince Bellis

Biological Diversity of Headwater Systems is Threatened by Habitat Destruction

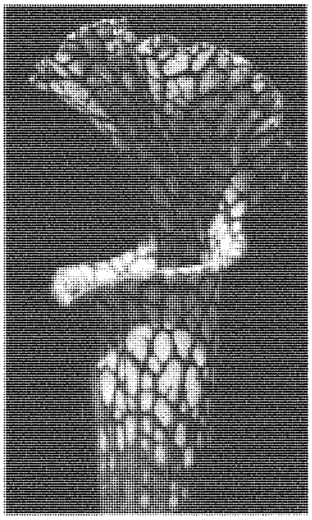
Because of their small size and intimate connections with surrounding landscape, headwaters and their inhabitants are easily influenced by human activities in watersheds and riparian zones. Changes to riparian vegetation or hydrology, water pollution, or the introduction of exotic species can have profound effects on biota living in headwaters.

Specialized headwater species can be particularly sensitive to habitat destruction because of their small geographic ranges, sometimes as small as a single headwater stream or spring. Thus, human activities have driven some headwater specialists, like the whiteline topminnow, to extinction, and imperiled many others. Furthermore, as the natural disjunction of headwater systems is increased by human activities such as pollution, impoundment, and destruction of riparian vegetation, more populations of headwater specialists may be extirpated.

Many headwater species, including fish, snails, crayfish, insects and salamanders, are now in danger of extinction as a result of human actions. A few dozen headwater species are already listed under the U.S. Endangered Species Act; hundreds of others are rare enough to be considered for listing. Given the diversity and sensitivity of headwater biota, it seems likely that continued degradation of headwater habitats will put more species at risk of extinction.

Wetlands Make Key Contributions to Biological Diversity

The presence of wetlands adds another aspect of habitat diversity to headwater systems and therefore increases the variety of species a headwater system may support. Most headwater wetlands are depressions in the ground that hold water permanently or seasonally, and scientists usually distinguish between ephemeral and perennial wetlands Wetlands provide critical habitat for a variety of plants and animals. Recent research found that a total of 274 at-risk plants and animals are supported by geographically isolated wetlands. Of those, more than one-third were restricted to these wetlands.



Pitcher plants, such as this white top (Sarracenia leucophylla), pictured top left; and sundews, such as this Drosera brevifolia, pictured bottom right; are among the carnivorous plants found in the Carolina Bay wetlands of the Southeastern U.S. Photo courtesy of David Scott/SREL

BIODIVERSITY IN EPHEMERAL WETLANDS

Some species of plants and animals prefer or require ephemeral wetlands. Certain zooplankton, amphibians, and aquatic plants need the wet phase of an ephemeral wetland to complete all or part of their life cycles. Other species that rely on ephemeral wetlands wait out the aquatic phase, flourishing only when pools shrink or disappear. For example, although adult spotted salamanders are generally terrestrial, during the springtime they trek to vernal pools to breed and reproduce. So-called amphibious plants, including button celery, meadowfoam, wooly marbles and many others do the opposite; although they live in water, they cannot reproduce until water levels drop. Some plants and crustaceans most strongly identified with ephemeral wetlands worldwide, including quillworts, fairy shrimp, and tadpole shrimp, are ancient groups that probably originated at least 140 million years ago. The disappearance of ephemeral wetlands would mean the loss of these highly specialized and ancient groups of plants and animals.

One type of ephemeral wetland found in both California and the Northeast is known as a vernal pool because it generally fills with water in the spring. In California, blooming flowers ring the edges and fill depressions of such pools. Of the 450 species, subspecies, or varieties of plants found in California's vernal pools, 44 are vernal pool specialists. Several such plants are already on the Endangered Species list. If California's vernal pool habitats were completely destroyed, at least 44 species would disappear. Although vernal pool animals are less well known, there appear to be at least as many specialized animals as plants. New species of specialists such as fairy shrimp and clam shrimp continue to be discovered.

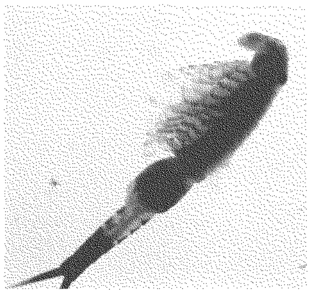
Other ephemeral wetlands also make significant contributions to biodiversity. A study of wetlands in the Southeast including cypress-gum swamps, cypress savannas, and grass-sedge marshes, found that plants from one wetland are often very different from those in others nearby. Such differences in nearby habitats increase overall biodiversity in a region. In some cases, differences

Pitcher plants, such as this white top (Sarracenia leucophylla), pictured top left; and sundews, such as this Drosera brevifolia, pictured bottom right; are among the carnivorous plants found in the Carolina Bay wetlands of the Southeastern U.S. Photo courtesy of David Scott/SREL

Although spotted salamanders are generally terrestrial animals, they only breed and reproduce in vernal pools. Photo courtesy of Vernal Pool Association

in periods of wetting and drying appear to be important for the persistence of many species. Different wetting and drying patterns explain some differences between Gromme Marsh and Stedman Marsh, two prairie pothole wetlands in Wisconsin. Although the two marshes are only about 450 yards apart, they have different species of dragonflies; also, Stedman Marsh has damselflies and caddis flies that Gromme Marsh lacks.

Amphibians are key parts of the food web in small wetlands. Some wetlands are hot spots for amphibian biodiversity; twenty-seven amphibian species, one of the highest numbers of amphibian species known from such a small area, inhabited a 1.2-acre ephemeral wetland in South Carolina. Other small wetlands in the region have been found to have similar numbers of amphibian species, demonstrating how small wetlands are especially important for maintaining the regional biodiversity of amphibians. Larger, more permanent wetlands may be less diverse because they may also be home to predators-such as crayfish and dragonfly larvae-that eat amphibian larvae.



A female fairy shrimp from the Ipswich River Basin in Massachusetts. Fairy shrimp spend their entire life cycles in vernal pools. Photo courtesy of Vernal Pool Association

Biodiversity in fens (A type of perennial wetland)

Plant biodiversity peaks in fens, unique perennial wetlands that occur where groundwater flows to the surface. Fens also provide clean water that supports downstream ecosystems; outflows from such wetlands are critical to the formation of the cold, low-nutrient streams that are ideal for trout. Although fens are rarely inundated, water seeps continuously into root zones.

Similar to other wetlands, the small land area covered by fens belies the high biodiversity found within them. For example, in northeastern Iowa, fens contain 18 percent of the state's plant species but cover only 0.01 percent of the land surface. Fens are probably the wetlands with the greatest numbers of plant species. Because groundwater that comes to the surface is typically low in available nutrients, fen plants are often dwarfed and the total mass of vegetation is typically low. As a result, no one species can become dominant and exclude other species.

In the Upper Midwest, more than 1,169 species of plants have been identified in fens, with more than half needing wet conditions. Fens also have a high proportion of plant species known to occur primarily in pristine sites. Often, such species are listed as rare, threatened or endangered. Of 320 vascular plant species found within fens in northeastern Iowa, 44 percent are considered rare. Fens themselves are imperiled: 160 fens that one researcher sampled in northeastern Iowa were all that remained from 2,333 historic fens.

Because diversity in fens stems from low nutrient availability, overfertilization can harm fens and, in turn, downstream ecosystems. Examining one fen in New York, researchers found the lowest diversity of plants where nitrogen and phosphorus inflows were greatest. Both nutrients came from agricultural activities: phosphorus was entering the fen primarily through surface water flows, while the nitrogen-containing compound nitrate was flowing with the groundwater. Thus, a loss of plant diversity in fens is a clear indication they are receiving excess nutrients, such as can occur when fertilizer runs off a field or urban lawn or water carries animal waste from farmyards. Allowing excess nutrients to enter fens can also damage downstream trout streams because trout prefer cold, low-nutrient streams. Therefore, the low-nutrient conditions of fens require protection from nutrient contamination.

A wood frog (Rana sylvatica) in an autumnal vernal pool in central Pennsylvania. Photo courtesy of Gene Wingert

Fens are unique perennial wetlands that occur where groundwater flows to the surface. Plant biodiversity peaks in fens: Among the 320 vascular plant species found in northeastern Iowa fens, 44% are considered rare. However, fens themselves are imperiled. Pictured is a fen wetland in Illinois. Photo courtesy of Steve Byers, Bluff Spring Fen Nature Preserve

Conclusion

Headwater streams and wetlands abound on the American landscape, providing key linkages between stream networks and surrounding land. Although often unnamed, unrecorded, and underappreciated, small headwater streams and wetlands-including those that are dry for parts of the year-are an integral part of our nation's river networks. Small wetlands, even those without visible surface connections, are joined to stream systems by groundwater, subsurface flows of water, and periodic surface flows. Current databases and maps do not adequately reflect the extent of headwater streams and associated wetlands. The resulting underestimate of the occurrence of such ecosystems hampers our ability to protect the key roles headwater systems play in maintaining quality of surface waters and diversity of life.

Essential ecosystem services provided by headwater systems include attenuating floods, maintaining water supplies, preventing siltation of downstream streams and rivers, maintaining water quality, and supporting biodiversity. These small ecosystems also provide a steady supply of food resources to downstream ecosystems by recycling organic matter.

> "THE PHYSICAL, CHEMICAL, AND BIOTIC INTEGRITY OF OUR NATION'S WATERS IS SUSTAINED BY SERVICES PROVIDED BY WETLANDS AND HEADWATER STREAMS."

Small streams and wetlands provide a rich diversity of habitats that supports unique, diverse, and increasingly endangered plants and animals. Headwater systems, used by many animal species at different stages in their life history, provide shelter, food, protection from predators, spawning sites and nursery areas, and travel corridors between terrestrial and aquatic habitats.

Since the 1970s, the federal Clean Water Act has played a key role in protecting streams and wetlands from destruction and pollution. We have made progress toward cleaner water, in part because the law has historically recognized the need to protect all waters of the United States. The health of downstream waters depends on continuing protection for even seemingly geographically-isolated wetlands and small streams that flow only part of the year.

These small streams and wetlands are being degraded and even eliminated by ongoing human activities. Among the earliest and most visible indicators of degradation is the loss of plant diversity in headwater wetlands. The physical, chemical, and biotic integrity of our nation's waters is sustained by services provided by wetlands and headwater streams.

Today's scientists understand the importance of small streams and wetlands even better than they did when Congress passed the Clean Water Act. If we are to continue to make progress toward clean water goals, we must continue to protect these small but crucial waters. The goal of protecting water quality, plant and animal habitat, navigable waterways, and other downstream resources is not achievable without careful protection of headwater stream systems.

Photo courtesy of Raymond Eubanks.

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http://www.nwrc.usgs.gov/

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UNLIMITED

TESTIMONY OF

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SUBMITTED TO THE

HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

ON

THE STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

JULY 19, 2007

Mr. Chairman, members of the Committee, I appreciate the opportunity to appear today to give you the views of Trout Unlimited (TU) on "The status of the Nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act," better known as the Clean Water Act (CWA).

Because of two recent Supreme Court decisions and the federal government's flawed guidance interpreting those decisions, the "status" of the Nation's waters under jurisdiction of the CWA is threatened, shrinking, and confused.

If we as a nation are to ever have any prospect of achieving the CWA's splendid goal – "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters"—this situation must be rectified as soon as possible. TU supports the Clean Water Restoration Act, HR 2421, as a critical step for restoring the historic scope of CWA jurisdiction and placing the nation back on track to achieve the goals of the CWA. TU believes the bill a good fix to the current confusion and commends the Committee for holding this important and timely hearing.

TU is the nation's largest coldwater fisheries conservation group dedicated to the protection and restoration of our nation's trout and salmon resources and the watersheds that sustain them. TU has over 150,000 members in 400 chapters in 38 states. Our members generally are trout and salmon anglers who give back to the waters they love by voluntarily contributing substantial amounts of their personal time and resources to fisheries habitat protection and restoration efforts. The average TU chapter donates 1,000 hours of volunteer time annually. Members' time is often donated to partnership projects with state and federal fisheries and water quality agencies designed to restore fish habitat in streams and rivers of vital interest to our members in their local areas.

Questions of constitutional authority loom large over the subject at hand today. TU members and staff generally are not constitutional law experts, but we do know a good bit about restoring and maintaining the Nation's waters. We always view these waters in a watershed perspective. Water resources within a watershed are all connected, from the top of the mountain to the smallest headwater to the remotest wetland to the majestic river in the valley to the coastal bays and to the oceans. TU works to conserve water resources and the trout and salmon fisheries they yield in the following ways:

- First, we **protect** the highest quality habitats for fish, wildlife, and water resources
- Second, we **reconnect** rivers to floodplains and higher elevation headwater streams to lower elevation lands;
- Third, we engage communities in land and water **restoration**. We work with landowners, industry leaders in conservation, towns, states and federal agencies from Alaska to Maine to accomplish our mission.

One of the most valuable lessons we have learned is that watershed restoration is impossible without maintaining the health of our headwater streams. **Headwater streams, especially the intermittent and ephemeral streams that are dry for parts of the year, are the "Rodney Dangerfields" of the water resource world: they don't get enough respect.**

Yet the best science we have tells us how extremely valuable headwater streams are. They are the very "roots" of all of our watersheds. If we damage or kill the roots, we damage or kill the "trees" --- the larger rivers that flow through our valleys, towns, and cities. The two Supreme Court decisions, and the guidance that followed each, threaten the health of the headwaters of many of the Nation's rivers. Headwater streams and geographically isolated wetlands must receive the level of protection from the CWA that they had prior to the rulings and guidance. That is why we so strongly support HR 2421. Below, I will briefly describe adverse impact of the decisions and guidance, the resources at risk, the activities that pose the risks, and the need for HR 2421.

Adverse Impact of the Supreme Court Decisions and Federal Agency Guidance

In 1972, Congress passed the CWA to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. To achieve the goal, Congress recognized the importance of broadly applying the CWA's programs to the "waters of the United States," including headwater streams and remote wetlands. The two recent split decisions of the U.S. Supreme Court: *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (*SWANCC*), issued in 2001, and *Rapanos v. United States,* issued in 2006, have narrowed and confused the extent of the CWA's geographic scope. The plurality in the *Rapanos* decision seemed to be especially hostile to small headwaters streams that are vital to healthy watersheds and successful implementation of the CWA.

EPA and the Army Corps of Engineers (Corps) responded to each decision with "guidance" that went even further than the decisions themselves in curtailing CWA geographic jurisdiction. In 2003, the Corps and EPA interpreted the narrow *SWANCC* decision broadly, directing Corps field offices not to assert jurisdiction over geographically separated waters like prairie potholes, playa lakes, and other wetlands. Then, in June 2007, in an overdue attempt to clarify the very confusing *Rapanos* decision, the federal government finally issued its *Rapanos* "guidance." For many non-navigable waters and wetlands, the *Rapanos* guidance insists on a narrowly focused case-by-case evaluation that promises to be both highly time intensive and unnecessarily narrow, thereby hurting both the regulated community and the waters Congress intended the CWA to protect. In the end, the guidance leaves key questions unanswered, and fails to provide a workable and protective framework for safeguarding the waters of the United States.

TU was especially disappointed by the Corps and EPA interpretation of Justice Kennedy's "significant nexus" test in the guidance. Kennedy emphasized a regional approach to establishing a significant nexus, indicating that wetlands may be within jurisdiction if they "either alone or in combination with similarly situated lands in the region, significantly affect" the physical, chemical, or biological health of a downstream, navigable river. Justice Kennedy also suggested that the federal agencies could establish rules regarding significant nexus for whole categories of tributaries.

Instead of following Kennedy's lead, the Corps/EPA Guidance requires that the agencies look only at the *directly affected* tributary reach to determine significant nexus—not, as Kennedy suggests, at the relationship of that particular tributary to the larger region. While it may be hard to document that every single small, pristine headwater tributary alone contributes significantly to the health of the mainstem of a river miles downstream, these tributaries, when grouped with others similarly situated in the region, most certainly do have a significant impact on that downstream mainstem of the river.

Therefore, six years after the *SWANCC* decision, important wetland areas and headwater streams that were protected for over 30 years have had their federal Clean Water Act protections inappropriately removed or threatened. As a result of these confusing decisions and the agencies' overly narrow interpretation through guidance, we now have doubt where there once was certainty. Consequently, an immense number of wetlands and streams are at risk.

Aquatic Resources at Risk

Waters most at risk from the *Rapanos* and *SWANCC* decisions are small, headwater streams, other intermittently flowing streams, wetlands associated with such streams, and geographically separated wetlands like prairie potholes, playa lakes, and vernal pools. Far from being "isolated" or "remote" waters, these waters are in fact the life blood of larger waters and some of the most vital waters to fish and wildlife. I am confident that my friends from Ducks Unlimited and the National Wildlife Federation will provide ample evidence of the functions and values of wetlands at risk. I will focus on the headwater streams at risk.

First, it is simply impossible to characterize any small stream, even if ephemeral or intermittent, as isolated. It is elementary that all water that starts out in small channels ultimately flows downstream in to larger waters. These small channels and streams, moreover, comprise a very large portion of the drainage of most watersheds, and their functioning profoundly affects the health of the entire watershed. In eastern watersheds, first and second order streams (most of which are ephemeral or intermittent) typically drain approximately fifty percent of the watershed, meaning that approximately half of the water moving through the watershed comes from these first order streams. A recent Forest Service study found that intermittent streams account for more than half the channel length in many watersheds of the Pacific Northwest. In more arid parts of the West, the numbers are even more striking. In Wyoming, 76 percent of Wyoming's 26,000 stream miles have a base flow of only 10 cubic feet per second (cfs) or less. Colorado has over 107,000 miles of streams; over 70,000 miles are either ephemeral or intermittent.

These numbers have several significant implications. First, small headwater streams are absolutely critical to the health of entire river systems. Small streams are the primary source for water, nutrients, and sediments in many river systems. Intermittent and ephemeral streams are capable of storing large quantities of sediment eroded during large storm events and releasing the it slowly over time. Major alterations to headwater streams can increase peaking flows and flood damage, increase sedimentation in larger rivers, and affect water quality in larger rivers.

In addition to playing a significant role in the physical processes of larger watersheds, ephemeral and intermittent streams play a critical biological role. Small headwater streams provide spawning and rearing habitat for a variety of species, including trout and salmon. This is true not only of perennial streams, but also of streams that do not flow year around. Very small ephemeral and intermittent channels can provide spawning habitat during higher flows. They can also provide refuge for juvenile fish to escape high flows or predators.

The body of studies documenting the importance of intermittent and ephemeral streams to the health of trout and salmon populations is large and growing. A 1976 California study estimated that 39-47 percent of the adult rainbow trout in the stream being studied spawned in an intermittent tributary. Trout were able to move into the stream and spawn during high spring flows, and young of the year were able to emigrate before low water periods. Similarly, westslope cutthroat trout in Lake Coeur d'Alene, Idaho use intermittent tributaries to spawn, with the fry emerging and moving downstream before the streams go dry.

An ongoing study of intermittent streams in the Sacramento River drainage funded by the U.S. Fish and Wildlife Service has shown heavy use of small intermittent tributaries by juvenile Chinook salmon for rearing purposes. A study in Washington state found that intermittent channels are an important winter refuge for juvenile coho salmon and steelhead trout.

Dry Creek, a tributary of the Missouri River near Townsend, Montana, is an intermittent stream that goes dry from October through March, and flows at less than 5 cfs for most of the rest of the year. Rainbow trout migrate into the stream during April and May, eggs incubate until mid-July, and fry migrate to the Missouri River before the stream dries out. Trapping conducted by the state of Montana in 1991 suggested that this intermittent stream produces approximately 8,000 rainbow trout fry each year. Pierce Creek is an intermittent tributary of the Swan River in Montana. Every spring cutthroat trout move upriver and occupy the creek for two to three months. Numerous other fauna, including other fish, amphibians, and insects, also use these streams for habitat.

Activities that threatened to harm the resources

Eliminating CWA jurisdiction over many small streams and geographically isolated wetlands means CWA jurisdiction may be eliminated for a substantial percentage of all watersheds. The implications for water quality and the functioning of larger streams are grave, as small streams are subject to a variety of polluting activities. In recent years, headwater streams have been threatened by sewage treatment plants associated with urbanizing communities, sedimentation from road construction, pollution from large animal feeding operations, channelization for flood control purposes, and fill and other manipulation for purposes of urban development, mining, and energy development.

TU has worked with many developers, landowners, state and federal agencies to ensure that development projects such as these are done in a manner that produces minimal or no impact on aquatic resources. The backbone of this work is the regulatory framework of the CWA and its programs. Provisions of these programs provide critical protection elements on their own, but they also serve as the backstop for state and local regulatory programs, many of which are integrally connected to CWA programs.

Section 404, for example, is a critical CWA program for protecting streams and wetlands of all sizes, and locations with in watersheds, from being filled in by various types of development. Section 404 is far from being a "just say no" regulatory program; the vast majority of permit applications are approved. Yet, it requires developers to avoid destruction of aquatic resources as much as possible and to mitigate for unavoidable impacts. TU members, chapters, and staff comment on Section 404 permit applicants and work with Corps and EPA to enforce its rules to protect streams, wetlands and valuable fisheries. Potentially destructive permit applications to bulldoze headwater streams in New York and West Virginia for flood control purposes in recent years are important examples of how we engage in Section 404 on the ground. Obviously, if CWA jurisdiction is lost for many headwater streams, the protection of Section 404 is lost as well.

The very heart of the CWA, Section 402's regulation of point source discharges from towns, counties, and polluting industries, is also jeopardized by the reduction in jurisdiction over headwater streams. The May 18 documents released by the EPA to Earthjustice show a surprisingly high percentage of NPDES permits with location data on the very intermittent and ephemeral streams which may lose jurisdictional coverage. Western states were especially noteworthy, including Wyoming with 46 percent, New Mexico with 55 percent, Montana with 21 percent, and Colorado with 32 percent. In the east, states that are especially important to TU are also striking, include Pennsylvania with 20 percent, Wisconsin with 28 percent, and Virginia with 19 percent.

This evidence fits our experience: development and urbanization are moving uphill, upstream, and into the mountains. New and expanded ski and golf recreational areas, for example, with associated housing and infrastructure, are driving the increased frequency for NPDES permits uphill to smaller, headwater streams. It is almost unthinkable that the vital protective programs of the CWA, such as its NPDES and stormwater programs, might be hamstrung by jurisdictional mess that we are in.

Congress should pass HR 2421 and get the CWA back on track for doing the job it always was intended to do.

For the health of the waters of the United States, Congress must act to restore the protections that existed prior to the *SWANCC* ruling in 2001. In the absence of a legislative fix, the *Rapanos* and *SWANCC* decisions will leave the protection of many waters in doubt as the federal agencies try and work through confusing jurisdictional determinations on a cumbersome case-by-case basis and courts create a patchwork of judicial guidance that will likely jeopardize the health of our waters.

H.R. 2421 offers a clear fix by providing a statement of congressional intent to restore the Clean Water Act protections that existed prior to the *SWANCC* ruling in 2001. The bill removes the words "navigable waters" that were given such a narrow construction by the Supreme Court, and substitutes the words "waters of the United States" – the term Congress used in the Clean Water

Act to define "navigable waters." The bill then defines "waters of the United States" in a manner nearly identical to the definition promulgated in rule and used by the Corps and EPA for over 30 years. Finally, the bill includes findings that emphasize the economic and ecological importance of wetlands, intermittently flowing streams, and other intrastate waters put at risk by the recent Supreme Court rulings, the economic activities that threaten them, and the constitutional basis for protecting them. TU urges the Committee to approve the bill and send it on to the floor of the House as soon as possible.

On behalf of Trout Unlimited, thank you for the opportunity to provide this testimony.

Before the U.S. House of Representatives
Committee on Transportation and Infrastructure

Hearing on
Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Testimony of
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Idaho Water Users Association, Inc.
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Submitted on behalf of
The National Water Resources Association and
The Family Farm Alliance

July 19, 2007

Mr. Chairman and members of the Committee, my name is Norm Semanko and I am here on behalf of the National Water Resources Association (NWRA) and the Family Farm Alliance. I am the Immediate Past President of NWRA and a long-standing member of the Advisory Committee for the Family Farm Alliance. We appreciate the opportunity to provide this testimony. I would like to thank NWRA's Water Quality Task Force Chairmen, Scott Campbell of Idaho and Mark Pifher of Colorado, as well as Dan Keppen, Executive Director of the Family Farm Alliance and the Alliance's Advisory Committee Chair, Dick Moss, for their assistance.

The Family Farm Alliance advocates for family farmers, ranchers, irrigation districts and allied industries in 17 Western States to ensure the availability of reliable, affordable irrigation water supplies. The Alliance's members use a combination of surface and ground water, managed through a variety of local, state and federal arrangements. In addition to my testimony, the Alliance has prepared a letter for the hearing record which is attached to my written testimony.

The National Water Resources Association is a collection of state water associations and represents the collective interests of agricultural and municipal water providers in the Western States. NWRA has an active Water Quality Task Force and has long been involved in matters regarding the Clean Water Act in Congress, before the administration, and in the courts. NWRA has also provided briefings for Congressional staff on matters relating to the Clean Water Act.

I. LOOKING BACK: THE STATUS OF CLEAN WATER ACT JURISDICTION

A. A GENERAL OVERVIEW

Without question, interpretation and application of the Federal Water Pollution Control Act (33 U.S.C. §§ 1251 *et seq.*, hereinafter referred to as "CWA", "the Clean Water Act", or "the Act") has engendered much consternation and litigation over the past thirty-five years. The reach and scope of CWA jurisdiction, in particular, has kept courtrooms busy as the issue has made its way from the federal district and circuit courts, all the way to and through the United States Supreme Court on several occasions. The regulatory landscape has been, and remains, muddled at best. This is true despite the recent United States Supreme Court decisions in *SWANCC* and *Rapanos*, and despite recently released guidance jointly issued by the Environmental Protection Agency and the Army Corps of Engineers in June 2007. Thoughtful efforts to clarify the scope and application of the CWA would be most welcome. We appreciate the opportunity to provide the Committee with our thoughts on the status of CWA jurisdiction.

There have been suggestions that jurisdiction under the Clean Water Act has been reduced, most notably by the *SWANCC* and *Rapanos* decisions. However, the real question is what the jurisdiction, or reach, of the Act was upon its enactment in 1972 and subsequent to that. Jurisdiction has been a moving target for many years. The Corps of Engineers and EPA historically took a narrower view of jurisdiction under the Act. This has been expanded over the decades through citizen lawsuits and ever-broadening interpretations by the federal courts and, consequently, the federal agencies charged with its implementation. Only now are we seeing some of the courts, including the U.S. Supreme Court, conclude that the agencies have, in some limited instances, overreached, going beyond the bounds of the Clean Water Act. By and large, however, the jurisdiction that is asserted by the agencies remains extensive and goes well beyond what was intended with the passage of the Clean Water Act.

B. JURISDICTIONAL OVERREACHING: SOME REAL-WORLD EXAMPLES

It is important to note that the jurisdiction asserted by federal agencies before and after the *SWANCC* and *Rapanos* decisions has been and continues to be extensive. The practical realities for water providers -- agricultural and municipal – have real-world consequences in the form of increased costs for everyday consumers of water. These costs come without any real improvements in water quality. In fact, they threaten to divert resources away from some of the real water quality problems that exist.

Let me provide some practical examples in three areas under the Act.

1. Section 303. Application of TMDLs to Artificial Water Conveyance Facilities

Under Section 303 of the Act, water quality limited segments – those rivers and streams that do not meet established water quality standards -- are identified. Thereafter, clean-up plans, or total maximum daily loads (TMDLs) are established with allocations made to the various users that impact the water quality of the rivers and streams. These TMDLs allow real water quality problems to be addressed in a focused way.

Unfortunately, the federal government has in some instances asserted jurisdiction over canals and drains and treated them as water quality limited segments. By labeling these artificial, manmade water conveyances -- many of which are concrete-lined, exhibit no fish habitat characteristics or other stream-like qualities whatsoever, and are completely dry during major portions of the year -- as "waters of the United States", the federal agencies have been successful only in diverting limited resources away from improving the quality of our rivers and streams.

Requiring TMDLs for lined water conveyance channels, rather than focusing on the rivers and streams that were intended to be protected under the Act, has had real-world consequences, not just for water providers, but for the everyday citizens that use the water, as well. No relief to this problem appears in sight.

2. Sections 401 and 402. Requiring NPDES Permits for Aquatic Herbicide Use

Under Sections 401 and 402 of the Act, discharges of point source pollutants into waters of the United States are prohibited without a National Pollutant Discharge Elimination System (NPDES) permit. Again, this program, like the TMDL program, has allowed real water quality problems to be addressed in a very focused way. However, over the 35 year history of the Act, litigious environmental groups have been successful is some cases in convincing federal courts that jurisdiction should be asserted over canals, ditches and drains as "waters of the United States". This has had the effect of dragging agricultural and municipal water providers into regulatory terrain that they never imagined could exist.

The use of aquatic herbicides, which are registered and fully regulated by EPA to protect the environment under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), has recently required NPDES permits to be obtained in several western states where their use is prevalent. This legal and regulatory exercise comes with little to no real gain for water quality. Again, resources are being drained, the focus is being pulled farther and farther away from the rivers and streams that were intended to be protected, and costs are escalating for end consumers.

We are encouraged that EPA has adopted a rule, clarifying that aquatic herbicides and other beneficial products, when used in accordance with FIFRA and the required label, are not pollutants and therefore their proper use in and around canals, ditches and drains does not constitute a point source discharge. However, this relief has come too late in some states that already required NPDES permits for these activities. In addition, the underlying jurisdictional question – whether the artificial, man-made water conveyance facilities are properly considered "waters of the United States" – was not resolved by EPA's rule.

3. Section 404. Asserting Jurisdiction over Work in Canals, Ditches and Drains

Finally, much of the jurisdictional focus has centered around Section 404, the so-called dredge-and-fill permit program. Again, this program was designed to protect the nation's rivers and streams, including adjacent wetlands. Unfortunately, aggressive regulators have expanded the reach of Section 404 by attempting to extend it to canals, ditches and drains.

Irrigation districts, canal companies and other water providers do routine maintenance work in their conveyance facilities every year. In addition, they are required to make more extensive improvements in the form of rehabilitation or replacement of some of the works from time to time. Water conservation activities such as lining or piping canals and drains are also commonplace activities, along with relocating portions of these water conveyance facilities for improved efficiencies. Without the ability to conduct these necessary activities, agricultural water delivery would come to a screeching halt. Additionally, many of these facilities provide a flood control function. In such cases, regular maintenance activities to maintain channel capacity are necessary to prevent serious flood damages.

The Corps of Engineers has, in certain cases, asserted that these activities are being conducted in "waters of the United States" and therefore require a 404 permit or reliance on one of these existing exemptions contained in the Act. As a result, we have spent the better part of the past two years working with the Corps, EPA and the Bureau of Reclamation to obtain a Regulatory Guidance Letter (RGL) helping to clarify the scope and breadth of the exemptions contained in the Act as they apply to these activities. We are certainly appreciative of these efforts by the federal agencies, which culminated with the release of the RGL earlier this month. However, the underlying question – whether these facilities are properly considered "waters of the United States" – was not addressed in the RGL. As a result, uncertainty continues to exist. In addition, the Corps already faces significant challenges with the timely processing of 404 permits. Requiring such permits for activities in water conveyance facilities would increase the already significant workload.

These few, but very concrete examples make it clear that jurisdiction under the Clean Water Act has been getting broader over the years, not narrower. *SWANCC* and *Rapanos* did not wipe the slate clean. Unfortunately, we have, and will continue to face, many jurisdictional problems under the Clean Water Act as it currently exists for years to come.

II. LOOKING FORWARD: POTENTIAL CHANGES TO THE ACT

Of course, there have been numerous discussions about a perceived need to "restore" jurisdiction under the Clean Water Act. As discussed above, jurisdiction has increased over the years. If anything needs to be "restored", it is a more reasonable interpretation of "waters of the United States" and what we perceive to be the intent of Congress when the CWA was enacted in 1972. While we appreciate the Chairman's efforts to focus the discussion and address this issue, the current legislation, H.R. 2421, "The Clean Water Restoration Act of 2007", would exacerbate the problem, rather than solving it. In addition, it would seriously erode the well-established and long-respected right of the states to manage their water resources and protect water quality.

A. THE LEGISLATION DOES NOT "RESTORE" CONGRESSIONAL INTENT; IT IGNORES IT

On May 22, 2007, the Chairman introduced H.R. 2421, "The Clean Water Restoration Act of 2007" ("CWRA"). It has been suggested that CWRA is necessary to reaffirm the original intent of the CWA, to end legal wrangling about what Congress meant when it passed the CWA in 1972, and to prevent the judicial branch from rewriting or redefining the scope and application of the CWA. However, the CWRA fails to accomplish any of these goals. Instead, it ignores the Congressional intent underlying the CWA and will give rise to more litigation, not less.

1. Congress Expressly And Repeatedly Used The Term "Navigable" in the Clean Water Act

Section 5 of the CWRA seeks to strike the terms "navigable waters of the United States" from the CWA in order to replace it with Section 4's all-encompassing definition of "waters of the Unites States." This proposed "restoration" of the CWA would read the touchstone term "navigable" out of the CWA in its entirety and replace it with a definition of "waters of the United States" that would include every conceivable "water" in the United States. This expansive interpretation has been rejected by the United States Supreme Court.

There can be no clearer indication of Congressional intent than that garnered from its express and repeated use of the term "navigable" when drafting and passing the CWA in 1972. Congress did not intend the CWA to touch all waters of the United States. Rather, the stated goal of the CWA is to eliminate the discharge of pollutants into the nation's "navigable waters." Likewise, the permissible discharge of pollutants to "navigable waters" requires a proper permit. Simply put, Congress' repeated use of the term "navigable" throughout the CWA was by design. If the term "navigable" is of no significant or independent import, the term would not have been inserted throughout the CWA. To read the term "navigable" out of the CWA, as the CWRA seeks to do, ignores express Congressional intent, rather than restoring it.

2. Congress Confirmed State Supremacy In The Planning, Development, And Use Of Land And Water Resources

Well-settled legislative and judicial authority has long recognized state and local government control over land and water use and development. For example, the Equal Footing Doctrine provides that new states enter the Union having the same sovereign powers and jurisdiction as the original thirteen states. Under this doctrine, among other things, a new state generally acquires title to the beds of inland navigable waters. This is as true of the Western States as it is for all other states. In addition, the Submerged Lands Act of 1953 declares that states generally have title to all lands beneath inland navigable waters and beneath offshore marine waters within their "boundaries," which generally extend three miles from the coastline. Finally, Section 8 of the Reclamation Act of 1902 provides that nothing in the Reclamation Act may be construed as affecting or in any way interfering with the laws of any State relating to the control, appropriation, use, or distribution of water used in irrigation. Moreover, Section 8 explicitly requires that the Secretary of the Interior proceed in conformity with state law in carrying out the Act. Collectively, these federal authorities and many others recognize the authority of each respective state to administer the waters of the state.

The Clean Water Act is no different. Section 101(b) of the CWA specifically and expressly recognizes, preserves, and protects the "primary responsibilities and rights of States" to prevent, reduce, and eliminate pollution, as well as to plan and develop the use of land and water resources. Similarly, CWA Section 101(g) provides and confirms the Congressional policy that "the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by" the CWA. As the United States Supreme Court declared in the landmark case of *California v. United States* in 1978, "[t]he history and relationship between the Federal Government and the States in the reclamation of the arid lands of the Western States is both long and involved, but through it runs the consistent thread of purposeful and continued deference to state water law by Congress."

To read the term "navigable" out of the CWA, and substitute it with the alarmingly broad definition of "waters of the United States", would eliminate long-recognized state sovereignty over their waters. This suggests that the existing use of the term "navigable" has no independent significance. As the U.S. Supreme Court noted in *SWANCC*, it is one thing to give a word limited effect, but it is quite another to give it no effect whatsoever. The CWA did not intend to federalize the nation's waters, yet that is exactly what the CWRA would do.

The language of the bill seeks to create a nexus between water quality protection and such activities as "bird watching and photography." It expands wetlands protection beyond traditional "dredge and fill" activities so as to encompass "draining," and it speaks in terms of "protecting federal land" in addition to the quality of waters. Each of these provisions represents an incremental, yet serious, expansion of federal jurisdiction under the CWA.

B. CONGRESS LACKS CONSTITUTIONAL AUTHORITY TO ENACT CWRA

1. The Commerce Clause, While Broad, Is Not Without Limits.

The term "navigable" as repeatedly used by Congress throughout the CWA amounts to a tacit recognition that the Commerce Clause is the basis of the Act's authority. This is because the federal government has long had the authority to protect navigation through the regulation of navigable waters. However, it is the states that have "virtually plenary" authority to regulate intrastate, non-navigable waters, as confirmed by the U.S. Supreme Court in 1935 in the case of. *California Oregon Power Co. v. Beaver Portland Cement Co.*

It is not unreasonable, nor surprising, that the U.S. Supreme Court has extended CWA jurisdiction to some non-navigable waters, as discussed in the *SWANCC* and *Rapanos* decisions.

This is because federal interests in navigation and interstate commerce could be affected by activities in non-navigable waters, provided that they are significantly connected to those navigable waters. However, such application of the Act has not been boundless. Instead, the Court has required that there be a "significant nexus" between the navigable and non-navigable waters before CWA jurisdiction can attach. This is because while broad, the Commerce Clause, and the authority it grants to Congress, is not limitless. The term "navigable" permeates the CWA in order to relegate federal regulation to its proper sphere of influence. Either the CWRA loses sight of the CWA's Commerce Clause limitations or the CWRA ignores them altogether.

2. The Other Constitutional Provisions Cited By CWRA Are Insufficient.

The authors of CWRA cite other Constitutional provisions as authority for the expansion of CWA jurisdiction to "all interstate and intrastate waters." More specifically, Sections 3(15) and 3(16) cite to the Treaty Clause, the Property Clause, and the Necessary and Proper Clause of the U.S. Constitution as the basis for CWRA. However, none of those clauses -- either individually or in combination -- provide Congress with the authority to regulate all intrastate waters.

The Necessary and Proper Clause is not an independent basis of authority. Rather, it gives Congress the authority to enact laws in furtherance of powers that have been specifically granted to the federal government elsewhere in the Constitution, such as the Treaty Clause and the Property Clause. By asserting that CWRA is a "necessary and proper means of implementing treaties to which the Unites States is a party," the authors of the bill are claiming that the United States cannot uphold its various treaty responsibilities unless the federal government obtains jurisdiction over all intrastate waters within thc country. At best, this reasoning requires a giant leap of faith, which is not an appropriate basis for constitutional decision-making.

The assertion that the Property Clause provides authority to enact CWRA is even more tenuous. That provision simply provides Congress with the power to regulate property owned by the federal government. Why the federal government would need jurisdiction over all intrastate waters within the entire United States to protect its property interests is inexplicable.

Simply put, the Commerce Clause is the only arguable constitutional authority for enacting CWRA. As such, federal jurisdiction over intrastate waters must have some nexus to navigability, as explained above. CWRA's expansive definition of "waters of the United States" fails to adhere to this limitation and therefore cannot withstand constitutional scrutiny.

C. THE CASE FOR EXPANDING FEDERAL JURISDICTION HAS BEEN GREATLY EXAGGERATED

After reading the justifications provided by the bill's drafters, one not familiar with this nation's regime for regulation of the environment would understandably conclude that there is some giant gap in the regulatory scheme that is allowing unchecked pollution in waters that are not currently within the jurisdiction of the CWA. However, this is simply not the case.

Even though smaller intrastate waters and wetlands areas may not be within the jurisdiction of the federal government, they are within the jurisdiction of state and local governments. The necessary implication is that these governments are incapable of effectively protecting their water resources. Otherwise, there would be no need for the legislation.

In addition, it is important to keep in mind that the federal government does have jurisdiction over discharges of solid wastes, hazardous wastes, and hazardous substances to non-jurisdictional waters through the Resource Conservation and Recovery Act and the Comprehensive Environmental Response, Compensation, and Liability Act.

It is also worth noting that the CWA is widely recognized as an extremely successful statutory regime. All of this progress has been achieved under the current version of the CWA. And more than five years' worth of this progress has been achieved since the Supreme Court's *SWANCC* decision in 2001, which the drafters of CWRA allege was the beginning of the Court's attempts to limit federal jurisdiction. Simply put, the sponsors of the bill have only spoken of the need for an expansion of federal jurisdiction in the broadest, most vague terms possible, without establishing any real need.

D. CWRA DOES NOT ACCOMPLISH ITS GOALS AND WOULD HAVE UNINTENDED CONSEQUENCES

One of the stated purposes of CWRA is to "clearly define" the scope of CWA jurisdiction. This is certainly a desirable goal. Uncertainty and confusion has had real-world effects on the ground, resulting in delays and extra expenses for those with potentially regulated projects.

To accomplish this goal, however, the drafters are attempting to assert jurisdiction over "all interstate and intrastate waters". Regardless of one's view of what the extent of federal jurisdiction should be, this bill does not clearly define jurisdiction. Instead, it introduces new uncertainties and ambiguities that will ultimately need to be resolved through litigation.

One reason CWRA is so ambiguous is that the drafters have not provided any indication of what is meant by "all intrastate waters". Operating under the assumption that "all" means "all", this phrase would include swimming pools, rain puddles, water features, stock ponds; the list goes on and on. Presumably, the drafters would disclaim such a ridiculous extension of jurisdiction, but unfortunately no limitations appear in the text of the bill.

One of the bill's Congressional supporters stated that the Army Corps of Engineers "has around 20,000 jurisdictional determinations pending", the implication of which is that enacting CWRA would reduce or eliminate the need for such determinations, thereby saving agency resources and speeding up the permitting process. However, such administrative efficiencies would be unlikely to materialize due to the imprecise nature of the phrase "all intrastate waters." In addition, because CWRA expands the scope of the CWA, more permits and the associated recordkeeping, inspections, and renewals would be required, thereby further stretching agency resources.

E. THE PROPOSED BILL WILL HAVE SIGNIFICANT ADVERSSE IMPACTS ON AGRICULTURAL AND MUNICIPAL WATER SUPPLY ACTIVITIES

1. The Impacts on Irrigated Agriculture Would be Disastrous

Simply put, the CWRA's effect upon irrigated agriculture will be disastrous. The CWRA will extend jurisdiction to virtually all agricultural irrigation facilities. Such a jurisdictional extension will paralyze the ability of water users to efficiently operate and maintain these facilities.

First, extending CWA jurisdiction over agricultural irrigation facilities will subject them to water quality standards that these facilities were not designed and are not operated to support. Irrigation facilities are owned, operated, and maintained to supply irrigation water. In many instances, irrigation entities are both contractually and state law-bound to deliver this water. These facilities were not designed, and they are not operated, to serve as fish and wildlife habitat or as recreational attractions. These facilities are privately owned and paid for by the water users who benefit from the water that they deliver. Operation and maintenance of irrigation facilities includes the application of various aquatic herbicides and other chemicals both to the water and to the banks of these facilities. These chemical applications are necessary to promote efficient water flows, to prevent plant induced water losses, and to prevent plant and/or animal induced destabilization or destruction of these facilities. These chemical applications could have short term water quality effects that would violate newly imposed water quality standards.

Second, irrigation facility operation and maintenance activities include physical and structural modification and upkeep. These maintenance activities include, but are not limited to, facility dredging, lining, piping, and relocation. The time, effort, and expense of securing permits for these activities would be astronomical. These added expenses would, by necessity, be borne by water users who in many instances would not be able to shoulder the additional financial burden. Traditionally, farmers are dirt rich, but money poor. In addition, many existing irrigation channels also provide a flood control or flood relief function. Thus, the need to maintain them is not just a necessity for continued irrigation deliveries, but also for flood control.

Third, the CWRA fails to account for the exigencies of operating and maintaining western irrigation systems. Many western states require that irrigation systems be operated not only to ensure the flow of water to water users, but that the operation of these systems be accomplished without harm to neighboring property owners. Emergency situations (such as facility failure) that cut off water supply, or that flood adjoining lands must be dealt with in a timely manner. Irrigation entities do not have the luxury of applying for a permit when time is of the essence. The CWRA could leave irrigation entities in an untenable position of having to choose between violating state law, by failing to timely address a problem that interferes with water supply or that causes flooding due to permit application and processing procedures, or violating the CWA, by acting immediately to rectify a problem that requires a permit prior to proceeding.

Some may argue that the aforementioned concerns are unfounded given the CWRA's "Savings Clause" in Section 6 of the bill. Theoretically, the Savings Clause would preserve current CWA exemptions enjoyed by the agricultural community such as the agricultural return flow exemption and the agricultural operations exemption. The problem, however, is that the CWRA's proposed definition of "waters of the United States" is so expansive that it threatens to render such exemptions meaningless. Put another way, the CWRA's proposed definition of "waters of the United States" unquestionably imposes CWA jurisdiction over irrigation facilities—a question or application of the CWA that is not currently absolute as many of the federal circuit courts have split on the issue. While various agricultural exemptions may be preserved on paper (via the CWRA's Savings Clause), it remains to be seen whether those exemptions will be preserved in practice. Once something is jurisdictional, overzealous enforcement and lawsuits initiated by environmental organizations can, and oftentimes do, follow. Basically, the Savings Clause exemptions are gutted by the jurisdictional aspect of the CWRA's newly proposed definition of "waters of the United States."

2. The Bill Would Result in Additional Complications and Costs for Municipalities

This unencumbered approach to the definition of "waters of the United States" would not only lead to additional unwarranted intrusion upon necessary agricultural practices as noted above, but would further complicate and substantially increase in cost municipal construction activities and "state" regulated municipal discharge practices.

For example, there would be additional instances of a "federal nexus" as municipalities construct necessary infrastructure, such as lengthy delivery pipelines and water storage facilities. Expensive and time consuming NEPA reviews would be triggered where none are currently implicated.

In addition, water "reuse" practices, such as non-potable irrigation applications on parks, golf courses and medians and zero discharge disposal options, each currently the subject of state regulatory requirements, could now be caught in the federal regulatory web.

CONCLUSION

In conclusion, NWRA and the Family Farm Alliance strongly urge the Committee to look closely at the history of jurisdiction under the Clean Water Act. Clearly, it has expanded significantly over the past thirty-five years, not narrowed. Significant problems are already being encountered by water providers with the existing Act and these challenges are expected to continue. Looking forward, we strongly oppose the CWRA because it is unconstitutional, unnecessarily and unjustifiably expands federal jurisdiction over intrastate waters, and would have significant adverse impacts upon agricultural and municipal water providers. We urge clarity, not expansion of the Clean Water Act.

Thank you again for the opportunity to provide this testimony. I would be pleased to answer any questions that you may have.

TESTIMONY OF DR. SCOTT C. YAICH

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BEFORE THE:

U.S. HOUSE OF REPRESENTATIVES COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT

CONCERNING:
"STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT"

July 19, 2007
WASHINGTON, DC

Mr. Chairman, members of the Committee, my name is Dr. Scott Yaich. I am the Director of Conservation Operations at Ducks Unlimited's (DU) National Headquarters in Memphis, Tennessee. I am certified as a Professional Wetland Scientist and Certified Wildlife Biologist by the Society of Wetland Scientists and The Wildlife Society, the professional organizations of these respective scientific disciplines. I have worked for DU since 2001, and previously served as Wetlands Program Coordinator and Assistant Director for the Arkansas Game and Fish Commission for 13 years. My current duties include responsibility for overseeing DU's scientific review and response to issues related to the Clean Water Act.

I appreciate the opportunity to speak with you today on behalf of Ducks Unlimited. Our organization was founded in 1937 by concerned and farsighted sportsmen conservationists. Our mission is to conserve, restore, and manage wetlands and associated habitats for North America's waterfowl, and for the benefits these resources provide other wildlife and the people who enjoy and value them. DU has grown from a handful of people to an organization of over 1,000,000 supporters who now make up the largest wetlands and waterfowl conservation organization in the world. With our many private and public partners we have conserved over 12 million acres of habitat for waterfowl and associated wildlife in the U.S., Canada, and Mexico. Ducks Unlimited is a science-based conservation organization. Every aspect of our habitat conservation work is rooted in the fundamental principles of scientific disciplines such as wetland ecology, waterfowl biology, hydrology, and landscape ecology. Thus, our perspectives on the Clean Water Act and related issues are based on our extensive grounding in these scientific disciplines.

WETLAND STATUS AND TRENDS

The Clean Water Act (CWA) has been an important component of the national framework of wetland conservation for over 30 years. It has been one of the most successful environmental programs in the nation's history, and many aspects of the country's water quality have improved measurably since 1972. Although the CWA has likely contributed to past declines in the rate of wetland loss, recent judicial decisions and regulatory actions put much of the nation's remaining wetland resources at increased risk of loss by effectively removing them from federal CWA jurisdiction.

The status of wetlands in the United States provides important context for our concerns about the extent to which they are protected by the Clean Water Act. Over 50% of the estimated 221 million acres of wetlands originally present in the United States have been lost. Although the rate of wetland loss has decreased since the mid-1950s, at least in some measure due to the passage of the Clean Water Act in 1972, recent studies document that nationwide losses of wetlands most important to waterfowl and other wildlife continue to exceed 80,000 acres per year. Discounting the addition of ponds that have little wildlife value, the nation has had a net loss of over 16 million acres of wetlands since the mid-1950s. Since 1986, the nation has lost over 2 million acres of vegetated wetlands and 1.4 million acres of freshwater marshes, among the most important types of wetlands for waterfowl and other wildlife. These kinds and magnitudes of losses not only have a cumulative negative impact on the waterfowl that our one million supporters care so passionately about, but also on the nation's water quality and other federal interests.

WETLAND FUNCTIONS AND VALUES

Wetlands as Wildlife Habitat: Wetlands provide a broad array of ecosystem functions, each carrying some measure of ecological and societal value. For example, the millions of small wetlands of the prairie pothole region (PPR) of Minnesota, North and South Dakota, Montana and Iowa are among the most important wetlands to waterfowl on the continent. However, of the approximately 20 million potholes that once existed in the northern U.S., only about 7 million remain. Over 95% of the potholes in Minnesota and Iowa have been drained or filled.

An estimated 50% of the average total annual production of ducks comes from the pothole region, and in wet years 70% or more of the continent's duck production can originate in the PPR. One analysis suggested that duck production in the pothole region of the U.S. would decline by over 70% if all wetlands of less than 1 acre were lost. However, wetland losses far less than this would significantly impact waterfowl numbers, and could result in closed waterfowl seasons with related economic impacts. In addition, 38% of the breeding ducks in the PPR of the Dakotas are associated with temporary and seasonal wetlands and wetlands less than one acre in size embedded in cropland. These wetland categories are at the greatest risk of loss in the absence of adequate Clean Water Act protections.

Unfortunately, significant losses of potholes continue to occur. The U.S. Fish and Wildlife Service's most recent report on wetland status and trends for 1998-2004 stated that, "Notable losses of freshwater vegetated wetlands occurred in the Prairie Pothole Region of eastern North and South Dakota, western Minnesota and Iowa." The report also stated that 82,500 acres of freshwater wetlands across the country were lost annually during that period, with 85% being smaller than five acres in size, and 52% smaller than one acre. Small wetlands are among the most productive and valuable as habitat for wildlife.

The prairie pothole region is but one example of a wetland ecosystem that has lost a significant proportion of its wetlands, with the remaining wetlands being at significant risk. Wetland systems such as the playa lakes of the southern plains, vernal pools of California, and rainwater basins of Nebraska have been negatively impacted to a similar degree, or worse. Less than 400, fewer than 5%, of the original rainwater basins remain in Nebraska today. This means that migrating waterfowl are increasingly concentrated and increasingly dependent upon this diminished resource. Approximately 50% of the mid-continent mallards and 90% of mid-continent white-fronted geese depend upon these few wetlands during migration. When such large numbers of waterfowl are abnormally concentrated on so few water bodies, they are highly susceptible to outbreaks of virulent disease that can kill large percentages of whole populations. Thus, the continued declining trends in wetlands across the nation's breeding, migration and wintering waterfowl habitats pose a significant threat to their future, to the future of waterfowl hunting, and to the other wetland-dependent and wetland-associated wildlife resources.

Waterfowl are a valuable interstate and international economic resource. Approximately 1.8 million waterfowl hunters expended almost $1 billion in 2001 for hunting related goods and services, resulting in a total estimated economic output of $2.3 billion, 21,415 jobs, and over $300 million in state and federal tax revenue. Approximately 18% of waterfowl hunting in 2001 took place in a state other than the one in which the participant resided. For example, in North

Dakota, 47% of the state's waterfowl hunters were non-residents, and in Arkansas over 42% of 89,000 waterfowl hunters in 2002 traveled there from other states. Furthermore, commerce tied to the waterfowl resource and other wetland-associated fish and wildlife is not restricted to hunting. In 2001, nearly 20 million people participated in watching waterfowl and shorebirds, with an associated economic output of approximately $9.8 billion.

Hydrologic Functions and Values of Wetlands: Wetlands provide important ecological goods and services to the nation through the hydrologic functions they serve. For example, a primary function of wetlands is to store water, and this equates to protection of downstream landowners and communities from flooding. Floods cause an estimated $3.7 billion in annual damage in the U.S., and wetland losses have exacerbated this by causing "more flood for less rain." The 1993 Midwest flood was (before Katrina) the largest flood disaster in U.S. history, causing $16 billion in damages. Approximately 60 million acres of wetlands in the Mississippi River watershed have been lost. Not entirely coincidentally, the three states with 75% of the damage in the 1993 flood (Illinois, Iowa and Missouri) have lost 89%, 85% and 87% of their wetlands, respectively. The water storage function of our remaining wetlands is even more important now because, since the flood of 1993 in the St. Louis area alone and on land that was underwater in 1993, there have been 28,000 new homes built, population has increased by 23%, 6,630 acres of commercial development has occurred, and there has been a total of $2.2 billion in new development.

Another example is the Red River Basin of northwest Minnesota and the eastern Dakotas. Approximately 75% of wetlands in this region have been drained, and the downstream portions of the area now experience major floods every 4-6 years, and a flood classified as "devastating" every 10 years. Small pothole basins in the Devil's Lake watershed in North Dakota could store 72% of the total runoff from a 2-year frequency flood and approximately 41% of the total runoff from a 100-year frequency flood. In a study of flooding in Massachusetts, the U.S. Army Corps of Engineers determined that flood damages would increase by $17 million per year if the 8,400 acres of wetlands in the Charles River basin were drained. Thus, wetland protection is a critical element of reducing flood damage along the nation's waterways, a hazard to which such areas are increasingly susceptible as a result of wetland loss.

Other Wetland Functions: Virtually all wetlands improve the quality of water that they receive and then discharge, doing so through either direct, physical means such as trapping sediment and associated chemical constituents, or storing and recycling nutrients and other chemicals. Evidence of the societal value of such water quality services is demonstrated by the actions of New York City to initiate a $250 million program to acquire and protect up to 350,000 acres of wetlands and riparian lands in the Catskills. The city is taking this action to protect the quality of its water supply as an alternative to constructing water treatment plants that could cost as much as $6-8 billion. In South Carolina, the wetland services provided by the Congaree Swamp negated the need for a $5 million wastewater treatment plant. Ducks Unlimited recently entered into a partnership with the National Association of Clean Water Agencies to help facilitate these kinds of actions.

WETLANDS AT RISK: SCIENCE AND THE LEGAL/ REGULATORY LANDSCAPE

Estimating Wetlands at Risk: There are ranges of estimates of the percentage of the nation's wetlands that have had Clean Water Act protections withdrawn from them as a result of the *SWANCC* and *Rapanos/Carabell* decisions in the U.S. Supreme Court, and the subsequent regulatory interpretations by the U.S. Army Corps of Engineers (USACE) and Environmental Protection Agency (EPA). The agencies estimated that 20 million acres would no longer be covered by the CWA as a result of the *SWANCC* decision. The Association of State Wetland Managers estimated it to be 30-60 million acres, or approximately 30-60% of the remaining wetlands. In the wake of the *Rapanos/Carabell* decision which resulted in the withdrawal of more wetlands from CWA jurisdiction, estimates have ranged from 40-80 million acres.

In the wake of the *SWANCC* case, Ducks Unlimited scientists reported in September 2001 the results of an assessment of the potential impact of the decision on wetlands in the landscapes most important to waterfowl. The post-*SWANCC* guidance had not yet been released, so a range of scenarios was evaluated. However, the worst-case scenario was closest to what has unfolded since 2001. This assessment estimated that up to 96% percent of the wetlands in the prairie pothole region and the Gulf Coast might no longer be considered jurisdictional (76% and 86% of the areal extent of wetlands in these regions, respectively). In the Great Lakes region, up to 90% of the remaining wetlands (33% of the wetland acreage) were considered at risk, whereas 88% of the wetlands (12% of the wetland acreage) of the mid-Atlantic Coast region were at risk. Overall, the vast majority of small, non-adjacent wetlands in the areas examined were put at significant risk of loss as a result of the *SWANCC* decision. The post-*Rapanos* guidance simply adds to the wetlands considered at risk in that evaluation.

It is difficult, at best, for the scientific community to develop such estimates because terms such as "geographically isolated wetland" and "adjacent wetland" are legal constructs that lack any grounding in science. From a scientific standpoint, virtually all of the nation's wetlands are linked to downstream or downslope navigable waters in one way or another. Although wetlands can be geographically isolated from navigable waters, and they can be sufficiently distant as to be referred to as non-adjacent in a colloquial sense, they almost always possess a hydrologic and/or ecologic nexus with navigable-in-fact waters. An appreciation of this fact is critical to understanding why the restoration of Clean Water Act protections is essential if the nation is to fulfill the Act's explicit purpose, which is *"to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."*

Significant Nexuses Between Geographically Isolated Wetlands and Navigable Waters Are the Rule: There are many examples of direct connections between navigable waters and wetlands that may on the surface appear to have no linkage to them, and numerous scientific studies document the significance of these connections to achieving the purposes of the CWA. During wet cycles in the pothole region, for example, water tables rise and surface water levels reach outlet elevations for most geographically isolated potholes, thereby augmenting other connections to downstream navigable waters. In the aggregate, these connections have a significant impact on downstream water quality and can significantly affect flood levels. These types of connections are demonstrable for many other wetland systems.

In addition, geographically isolated and other wetlands very often contribute to groundwater recharge, and this groundwater then moves downslope toward flowing streams that ultimately terminate in navigable waters. For example, 20-30% of the water loss from prairie wetlands can be seepage to groundwater. Subsequent groundwater discharge into flowing streams over 16 miles away from these geographically isolated wetlands has been documented. The sandhill wetlands of Nebraska have direct linkages to the High Plains (Ogallala) aquifer, as do playa lakes farther south, and these wetlands are important recharge sites for the aquifer, which stretches over thousands of miles and provides groundwater to numerous states. Water is being withdrawn from this aquifer faster than it is being recharged, so additional loss of these types of geographically isolated, but hydrologically and ecologically adjacent wetlands will only exacerbate the decline of the aquifer with negative economic affects on farming, ranching, and communities in the region, and will result in the direct loss of critical wildlife habitat. In addition, this aquifer discharges naturally to flowing streams and springs that lead to the Platte, Republican and Arkansas Rivers. These linkages not only provide a connection that can affect water quality, but that are also important for maintaining base flows of navigable waters and their tributaries. If climate change, as is widely predicted, results in an increasingly variable climate with more frequent and severe drought in many areas, protecting wetlands that hold and slowly release water to downstream users will be increasingly important for maintaining wildlife habitat, and for providing the water that supports local and regional economies.

In fact, the South Platte River in Colorado already has an economy built upon complex hydrologic models that incorporate knowledge of the time that water takes to move from sometimes far-removed, geographically isolated wetlands, to the river. Water has been valued and traded based on the knowledge that, in the example of the Tamarack project, that it will take over a year for water in a wetland to makes its way to the river where it can then be used for base flows to support wildlife needs, irrigation, or other economic uses. The Brush Prairie Wetlands project is established on the basis of a 5-year transit time from the wetlands to the river, and the Little Bijou reservoir is 8 miles from the river with water being traded 12 years in advance of its transit via groundwater to the river. It is the certainty of the significance and predictability of these hydrologic nexuses that allows this water to be traded as a commodity with real value as part of an interstate/federal agreement.

The negative side of these kinds of hydrologic nexuses between geographically isolated wetlands and flowing waters is that pollutants can also be carried into navigable waters along with the water. For example, there are a number of Superfund sites in Macomb County, Michigan, the same county as the Carabell wetlands (*June Carabell, et al. v. United States Army Corps of Engineers*), in which volatile organic compounds, polychlorinated biphenyls, heavy metals and other compounds have leached from geographically isolated disposal sites into groundwater aquifers, private drinking water wells, and ultimately to the Clinton River. Without jurisdiction over geographically isolated wetlands, this kind of problem could become more widespread.

Thus, wetland science clearly demonstrates the linkages that almost always exist between geographically isolated wetlands, remote tributaries, groundwater, and navigable waters, supporting the science-based contention that adjacency and significant nexus for determining jurisdictional wetlands must be interpreted from a functional perspective if water quality and quantity is to be protected as intended by the CWA.

Science and the Post-Rapanos Guidance: Unfortunately, because of the variable and interacting interpretations of the scientific information and judicial perspectives of the nine justices, the *Rapanos/Carabell* decision ultimately created more uncertainty than previously existed. Five justices clearly understand that to fulfill the explicitly stated purpose of the Clean Water Act, wetlands and other waters with a significant nexus to navigable waters and federal interests must be encompassed within the act's jurisdiction. Justice Kennedy's opinion was the pivotal one, and he articulated the concept of a significant nexus test, laying out the legal basis for a science-based conceptual approach with which to assess the jurisdictional status of wetlands and other waters. He explicitly stated that ecologic and hydrologic linkages, such as flood water storage, between wetlands and navigable waters should be considered. Most importantly for wetland ecosystems such as the prairie pothole region, rainwater basins, and playa lakes, he stated that the nexus between navigable waters and the wetland in question *in combination with similar wetlands in the region* should be considered in a significant nexus test. In addition, he gave a strong indication of the importance he placed on such aggregate impact considerations when he stated that an example of the important public purposes that should be served by the Clean Water Act was to address water quality issues such as the huge hypoxic zone in the Gulf of Mexico, a significant problem that can only be addressed by protecting and restoring many wetlands across the interstate landscape of the Mississippi River watershed. Thus, his opinion provided the opportunity to apply a scientific foundation for assessing jurisdictional status of all wetlands, regardless of distance or degree of isolation from navigable waters.

Unfortunately, however, due to the nature of the above-described types of ecologic and hydrologic connections that exist between most wetlands and navigable waters, Justice Kennedy's significant nexus test is virtually impossible to apply scientifically and efficiently within an administrative and regulatory context. Thus, the agencies apparently struggled in developing the post-*Rapanos* guidance. Ironically, the net effect of the guidance is that it is in many ways the worst of all worlds – it decreases the level of certainty and clarity that existed before the *SWANCC* and *Rapanos* cases, dramatically reduces the scope of Clean Water Act protections to the nation's wetlands, and increases the administrative and regulatory burden on the agencies, thereby increasing the time required to adequately process permit applications.

WETLAND PROTECTION AND PUBLIC OPINION

The public consistently demonstrates a fundamental concern for having clean, abundant water, and wetlands and other natural habitats that support healthy fish and wildlife populations and the associated recreational pastimes. An independent nationwide survey contracted by Ducks Unlimited documented that 15 times more citizens believed there were too few wetlands than those who believed there were too many. The same survey showed that 91% of the public stated that it was important to protect and conserve wetlands, with only 3% being neutral or considering it unimportant. Furthermore, survey after survey has reinforced that the American public has a deep concern about water quality and has high expectations for water conservation. A recent Harris interactive poll documented that 74% of U.S. adults agreed that "protecting the environment is so important that requirements and standards cannot be too high, and that continuing environmental improvements must be made regardless of cost."

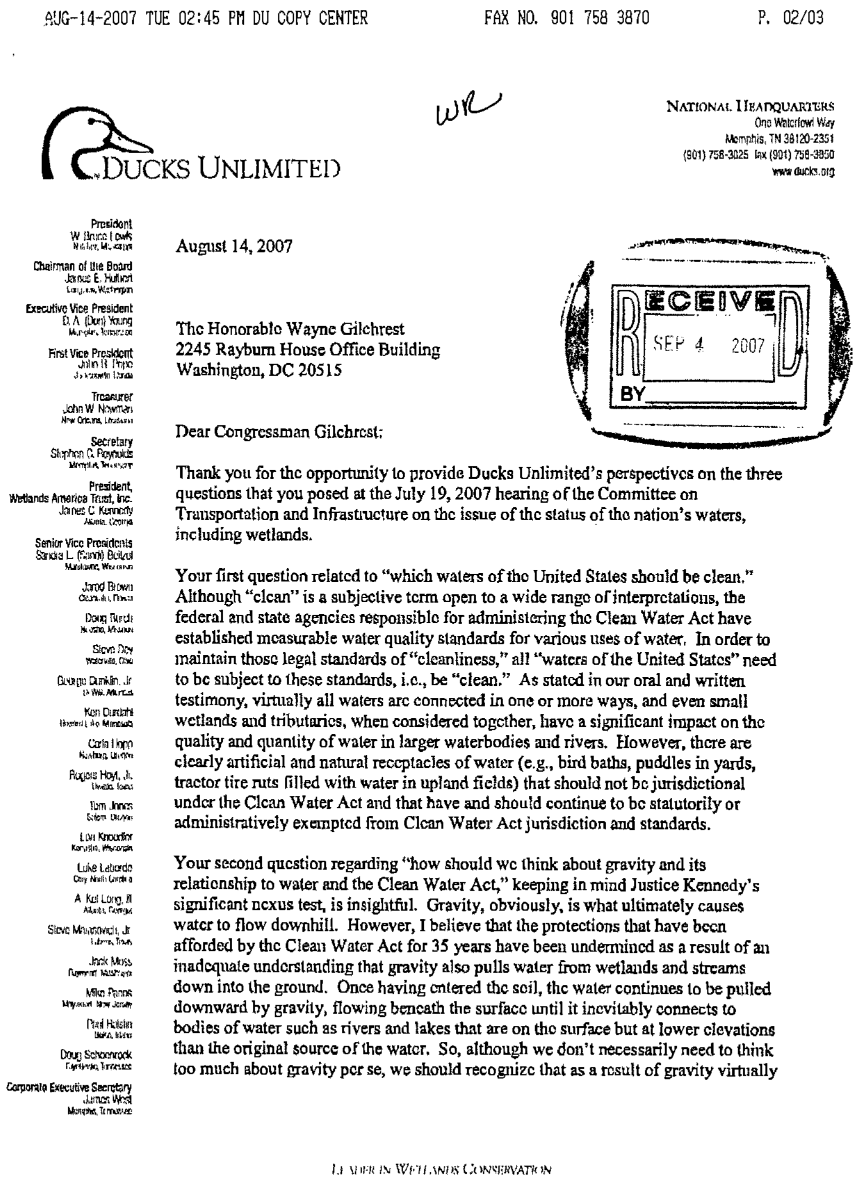
Thus, the American public, including Ducks Unlimited's million supporters, expect that the health of our wetlands and other waters will be maintained for their individual interests and for the collective good of the nation.

CONCLUSIONS

This brief review outlines some of the key aspects of wetland and aquatic ecology that provides the scientific basis for protecting wetlands within the framework of the Clean Water Act.. Some of the most important points are:

- a majority of the nation's wetlands have already been lost, and this has had a negative impact on the remaining wetlands and waters of the U.S. and related federal and public interests;
- wetlands serve important ecologic and societal functions, including providing critical habitats for waterfowl and other wildlife, providing flood control and base flows for rivers, streams and groundwater aquifers, and protecting and improving the quality of water that flows downstream to other users; and, these functions have an increasing value as wetlands continue to be lost;
- as a consequence of recent Supreme Court decisions and subsequent interpretations by agencies that resulted in a regulatory framework that has not relied upon the best available science to "restore and maintain the chemical, physical and biological integrity of the Nation's waters," millions of acres of wetlands are now at significantly increased risk of loss due to the withdrawal of important CWA protections and increased regulatory uncertainty;
- science supports the generalization that virtually all wetlands, in combination with similar wetlands in a particular region, possess significant hydrologic and ecologic nexuses with navigable waters and have a direct effect on the quantity and quality of such waters;
- fulfillment of the primary purpose of the Clean Water Act requires the restoration of wetland protections that existed prior to the *SWANCC* decision.

In light of all the above, it is clear that the nation's remaining wetlands are at significant risk of loss, and the waterfowl, other wildlife, and related interests that depend upon these wetlands are similarly at risk. Passage of legislation is the only apparent remedy for restoring wetland protections that are at least as strong as those that existed prior to 2001. Wetland and hydrologic science provides the basis for such protection under the Clean Water Act.



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August 14, 2007

RECEIVED
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BY________

The Honorable Wayne Gilchrest
2245 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Gilchrest:

Thank you for the opportunity to provide Ducks Unlimited's perspectives on the three questions that you posed at the July 19, 2007 hearing of the Committee on Transportation and Infrastructure on the issue of the status of the nation's waters, including wetlands.

Your first question related to "which waters of the United States should be clean." Although "clean" is a subjective term open to a wide range of interpretations, the federal and state agencies responsible for administering the Clean Water Act have established measurable water quality standards for various uses of water. In order to maintain those legal standards of "cleanliness," all "waters of the United States" need to be subject to these standards, i.e., be "clean." As stated in our oral and written testimony, virtually all waters are connected in one or more ways, and even small wetlands and tributaries, when considered together, have a significant impact on the quality and quantity of water in larger waterbodies and rivers. However, there are clearly artificial and natural receptacles of water (e.g., bird baths, puddles in yards, tractor tire ruts filled with water in upland fields) that should not be jurisdictional under the Clean Water Act and that have and should continue to be statutorily or administratively exempted from Clean Water Act jurisdiction and standards.

Your second question regarding "how should we think about gravity and its relationship to water and the Clean Water Act," keeping in mind Justice Kennedy's significant nexus test, is insightful. Gravity, obviously, is what ultimately causes water to flow downhill. However, I believe that the protections that have been afforded by the Clean Water Act for 35 years have been undermined as a result of an inadequate understanding that gravity also pulls water from wetlands and streams down into the ground. Once having entered the soil, the water continues to be pulled downward by gravity, flowing beneath the surface until it inevitably connects to bodies of water such as rivers and lakes that are on the surface but at lower elevations than the original source of the water. So, although we don't necessarily need to think too much about gravity per se, we should recognize that as a result of gravity virtually all waters, including wetlands, are connected to other and larger waterbodies that reside at lower elevations. Finally, when the cumulative impacts of these kinds of connections between the many small wetlands and tributaries in watersheds are considered, as Justice Kennedy indicated should be the case, the significant nexus between them and their impact on downstream and downslope waters becomes clear.

Your third question, "does it matter whether or not human activity regarding the hydrologic cycle is important," also focuses on a critical point. From the standpoint of fulfilling the purposes of the Clean Water Act, I believe there are two answers, depending upon the perspective from which the question is viewed. From an ecological perspective, yes, human activities that affect water at one point within the hydrologic cycle can have a tremendous impact on the water at other points of the cycle. For example, when geographically isolated wetlands are filled in and can no longer serve as a functioning wetland, there are important negative affects on downstream waters. These negative effects can include increased flooding, decreased summer flows, and reduced water quality, as well as loss of fish and wildlife habitats. So, activities undertaken at one point within the hydrologic cycle are indeed important to other parts of the hydrologic cycle.

On the other hand, one could say that from the regulatory perspective of whether or not human activities within the hydrologic cycle should be an important consideration in severing Clean Water Act jurisdiction, the answer should be "no." For example, a natural stream that has been converted to a straightened ditch, but which still connects upstream waters to downstream waters, should remain within the jurisdiction of the Clean Water Act if the Act is to fulfill its purposes. Similarly, placement of a dam somewhere along the flow of water does not truly sever all the nexuses between the upstream and downstream waters. Thus, neither should Clean Water Act jurisdiction be severed by such human activities.

On behalf of Ducks Unlimited, I would like to express my appreciation for the opportunity to testify on this critical issue, and I hope that my answers to your questions provide perspectives that are useful to you and other committee members.

Sincerely,

Scott C. Yaich, Ph.D.
Director of Conservation Operations

cc: Chairman and House Ranking Members, Committee on Transportation and Infrastructure

Nos. 04-1034 and 04-1384

In The
Supreme Court of the United States

◆

JOHN A. RAPANOS, *et al.*,

Petitioners,

v.

UNITED STATES OF AMERICA,

Respondent.

◆

JUNE CARABELL, *et al.*,

Petitioners,

v.

UNITED STATES ARMY CORPS OF ENGINEERS, *et al.*,

Respondents.

◆

On Writs Of Certiorari To The United States Court Of Appeals For The Sixth Circuit

◆

BRIEF OF FORMER EPA ADMINISTRATORS CAROL M. BROWNER, WILLIAM K. REILLY, DOUGLAS M. COSTLE, and RUSSELL E. TRAIN AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS

◆

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INTERESTS OF *AMICI CURIAE*[1]

Amici curiae[2] are a bipartisan group of former Environmental Protection Agency ("EPA") Administrators, spanning nearly twenty years of service, with an interest in the continued application of the Federal Water Pollution Control Act of 1972, 33 U.S.C. § 1251 *et seq.* (hereinafter "Clean Water Act") to all waters of the United States, including tributaries and adjacent wetlands like those involved here. These cases are about much more than two isolated disputes over the U.S. Army Corps of Engineers' ("Corps") wetlands jurisdiction. Petitioners' arguments to exclude non-navigable waters and their adjacent wetlands from federal regulation strike at the very heart of the nation's water pollution control programs. As the agency primarily charged with implementing the Clean Water Act, EPA has worked closely with the states over the last three decades to make steady progress toward reducing waterborne contamination and restoring the commercial, recreational, and ecological health of our aquatic systems. *Amici* have an abiding interest in ensuring that this successful federal state partnership and the long-settled administrative practices on which it is built are not weakened by an unnecessarily narrow interpretation of the statute.

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[1] All parties have consented to the filing of this brief in letters that are on file with the Clerk. Pursuant to Rule 37.6, counsel for *amici* state that no counsel for a party authored this brief in whole or in part and no person or entity, other than *amici* or their counsel, made a monetary contribution to the preparation or submission of this brief.

[2] *Amici* are Former EPA Administrator Carol M. Browner (Jan. 1993 to Jan. 2001), Former EPA Administrator William K. Reilly (Feb. 1989 to Jan. 1993), Former EPA Administrator Douglas M. Costle (Mar. 1977 to Jan. 1981), and Former EPA Administrator Russell E. Train (Sept. 1973 to Jan. 1977).

SUMMARY OF ARGUMENT

The key phrase at issue here – "waters of the United States" – undergirds every water pollution control program established in the Clean Water Act, not just the wetlands permit program. Most significant among these water quality efforts are the law's basic prohibition against discharging pollutants into waters without a permit, 33 U.S.C. § 1311(a), the National Pollutant Discharge Elimination System ("NPDES") permit program established by section 402 of the Act, 33 U.S.C. § 1342, and the statute's linked water quality-based requirements. In broadly defining "navigable waters" as "waters of the United States," Congress recognized both the reality of hydrologic cycles and the need to address pollution at its source. Given the quintessentially economic activities regulated by the statute, and by the Corps in these particular cases, Congress unquestionably acted within its Commerce Clause powers in articulating a statutory definition broad enough to effectuate the statute's various pollution control programs.

In the three decades since the Clean Water Act's passage, regulatory agencies and the courts have given effect to Congress' intent by consistently interpreting the term "navigable waters" to cover all interconnected waters, including non-navigable tributaries and their adjacent wetlands. The system of cooperative federalism that Congress envisioned in crafting the Clean Water Act has since developed into a robust federal-state partnership that relies heavily on this interpretation of the statute's jurisdiction. The radical reinterpretation that Petitioners press here would upend long-settled expectations, hamstring enforcement efforts, and impair the ecological, recreational, and commercial value of the nation's lakes, rivers, and coastal estuaries.

Petitioners base their arguments primarily on an expansive misreading of a few clauses in *Solid Waste Agency of Northern Cook County ("SWANCC") v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001), while failing to heed the more directly applicable holdings and language of *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121 (1985). The touchstone for the Court's analysis in both cases was the scope of the term "navigable waters," expressly defined by the Clean Water Act as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). In *Riverside Bayview*, the Court recognized that the Clean Water Act confers broad regulatory jurisdiction on the Corps and EPA over "wetlands adjacent to but not regularly flooded by rivers, streams, and other hydrographic features more conventionally identifiable as 'waters.'" 474 U.S. at 131. The Court's decision in *SWANCC* confirmed the ongoing validity of *Riverside Bayview,* concluding only that Clean Water Act jurisdiction does not extend as far as non-navigable "isolated ponds, some only seasonal, wholly located within two Illinois counties" solely because they serve as habitat for migratory birds. 531 U.S. at 171-72.

The Corps' actions in both *Rapanos* and *Carabell* fall squarely within the contours of *Riverside Bayview*. Petitioners' arguments amount to nothing more than a request by two commercial real estate developers that the Court second-guess the ecological judgments of the expert administrative agencies concerning water flows, the significance of wetlands and their connection to tributaries, and the role of these components of the aquatic system in protecting water quality. *Riverside Bayview* soundly rejected Petitioners' proffered approach, deferring to the agencies' general regulatory judgments and site-specific ecological assessments. There is no reason for the Court to revisit this settled issue.

◆

ARGUMENT

I. A BROAD INTERPRETATION OF THE TERM "WATERS OF THE UNITED STATES" IS PIVOTAL TO THE NATION'S WATER POLLUTION CONTROL EFFORTS.

Although focused on jurisdictional wetlands, these cases have vastly broader and more troubling implications. Petitioners essentially ask the Court to rewrite and restrict the definition of "waters of the United States," a phrase that governs not only the jurisdictional scope of section 404 "dredge and fill" permits like the ones at issue here, but also every other pollution protection program established by the Act. A decision by the Court to cast aside more than three decades of settled administrative and judicial interpretations of the phrase "waters of the United States" would strike a crippling blow at the underpinnings of the Clean Water Act.

A. The Clean Water Act of 1972 Constituted a Radical Departure from Prior Federal Water Quality Laws and Enacted a Comprehensive Pollution Control Regime.

Adopted in the wake of burning rivers and toxic fish, the Clean Water Act discarded the ineffective approaches of the past and set a bold new course for cleanup of the nation's polluted waterways. The overarching objective of the Clean Water Act is no less than "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To achieve this objective, Congress declared the ambitious goals of attaining "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water" by 1983 and eliminating altogether the discharge of pollutants into navigable waters by 1985. 33 U.S.C. § 1251(a)(1)-(2). In addition to its aspirations of achieving "fishable" and "swimmable" waters, the statute also announced a new national policy of prohibiting "the discharge of toxic pollutants in toxic amounts." 33 U.S.C. § 1251(a)(3). Thus, as this Court has recognized, the contemporary Clean Water Act is a comprehensive pollution control law aimed at controlling commercial activities that previously evaded regulation under federal, state and local laws. *City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304, 310, 317-18 (1981) (finding that the 1972 amendments constituted "a 'total restructuring' and 'complete rewriting' of the existing water pollution legislation"). *See also Environmental Protection Agency v. California*, 426 U.S. 200, 202 (1976) (discussing the ineffectiveness of pre-1972 state and federal water pollution control efforts); *Train v. City of New York*, 420 U.S. 35, 37 (1975) (stating that 1972 amendments "provide a comprehensive program for controlling and abating water pollution").[3]

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[3] The statute also directs the EPA Administrator, in cooperation with the states and others, to "prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters and improving the sanitary condition of surface and underground water." 33 U.S.C. § 1252(a). These comprehensive programs must "conserve such waters for the protection

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To achieve these ends, Congress built the Clean Water Act's key provisions around the then-novel concept that, except as specifically allowed, "the discharge of any pollutant by any person shall be unlawful." 33 U.S.C. § 1311(a). The pivotal term "discharge of pollutant" is statutorily defined as "any addition of any pollutant to navigable waters." 33 U.S.C. § 1362(12)(A). The term "navigable waters" is, in turn, defined by statute as "waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7). Thus, the scope of EPA's and the Corps' jurisdiction to regulate the discharge of any pollutant under the Clean Water Act is coextensive with the reach of the phrase "waters of the United States."

As this Court has recognized, "Congress evidently intended [in 1972] to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed 'navigable' under the classical understanding of that term." *Riverside Bayview*, 474 U.S. at 133 (citing S. Conf. Rep. No. 92-1236, at 144 (1972) and 118 Cong. Rec. 33756-57 (1972) (statement of Rep. Dingell)). These earlier statutes – particularly the Rivers and Harbors Act of 1899, 33 U.S.C. § 401 *et seq.*, and the Federal Water Pollution Control Act of 1948, as amended – were focused on waters that are or have been used, or may be susceptible for use,

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and propagation of fish and aquatic life and wildlife, recreational purposes, and the withdrawal of such waters for public water supply, agricultural, industrial, and other purposes." *Id.* Additionally, the statute funds basinwide water quality planning, to be done on a watershed basis taking into consideration "rivers and their tributaries, streams, coastal waters, sounds, estuaries, bays, lakes, and portions thereof as well as the lands drained thereby." *Id.* § 1252(c).

to transport interstate commerce and were generally considered inadequate to regulate industrial pollutants.[4] Growing public concern over water quality and the inability of existing laws to effectively control pollutants at their source led directly to enactment of the new Clean Water Act in 1972, with its focus on the all-encompassing section 402 discharge permit program. *See* Gregory J. Hobbs, Jr. and Bennett W. Raley, *Water Rights Protection in Water Quality Law*, 60 U. Colo. L. Rev. 841, 849 (1989).

B. Petitioners' Interpretation Would Eviscerate the Section 402 NPDES Permit Program, which Lies at the Heart of the Clean Water Act.

The NPDES program under section 402 is the cornerstone of the Clean Water Act's pollution control efforts, entirely replacing the Corps' nascent permit program under the Rivers and Harbor Act. *See* 33 U.S.C. § 1342(a)(5).[5] It constitutes a comprehensive permit system for "the discharge of any pollutant" into waters of the United States, requiring that all such discharges comply with technology-based effluent limitations established by EPA for various industrial categories of "point sources." *Id.* § 1342(a)(1). NPDES permittees also must comply with backstop water-quality based effluent limitations, if and as necessary to protect public health, industrial and recreational uses, and ecological functions. *Id.* § 1312(a). The section 402 program broadly applies both to conventional pollutants, such as those commonly associated with sewage treatment activities and industrial operations, and to those dangerous chemical pollutants deemed "toxic" by the EPA Administrator. *Id.* § 1317(a)(1).

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[4] In the 1960's, the Corps began regulating industrial pollutants under section 13 of the Rivers and Harbors Act, 33 U.S.C. § 407, which prohibits the discharge of refuse (but not sewage) into navigable water and "any tributary of any navigable water from which the same shall float or be washed into such water." *See United States v. Standard Oil Co.*, 384 U.S. 224, 230 (1966) (release of aviation fuel into river). However, the agency's attempt to develop a formal discharge permit program extending to both navigable waters and their tributaries was dealt a blow in *Kalur v. Resor*, 335 F. Supp. 1, 9 (D.D.C. 1971) (finding permit regulations adopted in 1971 to be *ultra vires*). *See also generally* Donna M. Downing, Cathy Winer, and Lance D. Wood, *Navigating Through Clean Water Act Jurisdiction: A Legal Review*, 23 Wetlands 475, 476-78 (Sept. 2003) (describing history of Rivers and Harbors Act and judicial interpretations of traditional navigability test); Maria V. Maurrase, *Oklahoma v. EPA: Does the Clean Water Act Provide an Effective Remedy to Downstream States or Is There Still Room Left for Federal Common Law?*, 45 U. Miami L. Rev. 1137, 1146-49 (1991) (describing inadequacies of pre-1972 Federal Water Pollution Control Act).

Petitioners' reading of the phrase "waters of the United States" to exclude non-navigable tributary waters and their adjacent wetlands based on geographic proximity (or, as the *Carabell* Petitioners apparently contend, failure to prove a robust hydrologic connection to directly adjacent waters) threatens to unravel the protections of the NPDES permit program. A watershed is a vast braided network of streams, wetlands, and pools, intertwining to form the great rivers, lakes, and estuaries downstream. Upstream tributary streams – which form at least 75 percent of the nation's stream miles – act as a complex living filter system and are biologically and hydrologically critical to gathering and gradually releasing the water that fills larger rivers and lakes, in the process removing pollutants and sediments. Judy L. Meyer et al., *Where Rivers are Born: The Scientific Imperative for Defending Small Streams and Wetlands* 6-7, 10-15 (2003).[6] Downstream water quality depends on the protection of upstream areas and suffers if they are degraded. *See, e.g.*, Bruce J. Peterson et al., *Control of Nitrogen Export from Watersheds by Headwater Streams*, 292 Science 86, 89 (April 6, 2001) ("Restoration and preservation of small stream ecosystems should be a central focus of management strategies [to] . . . improve the quality of water delivered to downstream lakes, estuaries, and oceans" because nitrogen processing is much more rapid and effective in headwater tributaries"); EPA Region 3 Comments on Advanced Notice of Proposed Rulemaking on the Clean Water Act Regulatory Definition of "Waters of the United States" ("ANPRM") at 7 (pathogens from upstream sewage treatment facilities located on smaller order tributaries, such as many of the facilities in the Mid-Atlantic region, can survive long distances and end up in downstream drinking water); EPA Region 6 ANPRM Comments, Enclosure at 1.[7]

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[5] The Clean Water Act dramatically changed the prior legal landscape by conferring on the newly-created EPA the responsibility for implementing the section 402 permit program and all other facets of the statute, save for the section 404 permit program. *See* 33 U.S.C. § 1251(d). Consistent with the Corps' historic role over dredge and fill activities in navigable waters, the Act conferred section 404 permitting authority on the Corps, but gave EPA ultimate veto authority over such permits. *Id.* § 1344(a)-(c). *See* 43 U.S. Op. Atty. Gen. 197, 201-02, 1979 WL 16529 (Sept. 5, 1979) (noting that the term "navigable waters" is the linchpin for all Clean Water Act programs and concluding that EPA, not the Corps, has the ultimate authority for a uniform definition of the term).

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[6] This publication is available at http://www.americanrivers.org/site/DocServer/WhereRiversAreBorn1.pdf?docID=182.

[7] On January 15, 2003, EPA and the Corps jointly published this advanced notice seeking public comment and soliciting technical information on potential regulatory changes or clarification in light of the Court's decision in *SWANCC*. 68 Fed. Reg. 1991 (Jan. 15, 2003). The

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Tens of thousands of NPDES permits have been issued across the nation, primarily by state agencies in the 45 states that have been delegated such permitting authority by EPA. Many of these permits regulate discharges into non-navigable tributaries, including discharges from both industrial processes and municipal sewage treatment facilities. *See, e.g.,* EPA Region 6 ANPRM Comments, Enclosure at Table 2. If the Court were to hold that distant, intermittent or artificial tributaries to navigable waters are excluded from the definition of "waters of the United States," many – if not most – of the nation's waters would lose the important protections of the NPDES program, virtually overnight. *See, e.g.,* EPA Region 1 ANPRM Comments, Attachment at 12 (explaining that publicly owned treatment works in New England could freely discharge poorly treated sewage if the NPDES program does not cover tributaries); EPA Region 9 ANPRM Comments at 12-13 (noting that major discharge sources in the region, such as mines and sewage treatment plants, would lose NPDES protection). For instance, Missouri has over 84,000 miles of intermittent/ephemeral streams and 82 percent of the state's NPDES permittees discharge to these streams; limiting the reach of the Clean Water Act to

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agencies received roughly 130,000 comments from the states, regional EPA offices, various stakeholders, and the general public overwhelmingly opposed to any regulatory change that would restrict the scope of the current definition. In this brief, *amici* cite to several of the federal and state agency comment letters, which are available at http://www.earthjustice.org/backgrounder/display.html?preview=yes&ID=143 (EPA regional office comments) and http://www.earthjustice.org/backgrounder/display.html?ID=68 (individual state comments), respectively, and are referenced herein as "ANPRM Comments." Ultimately, EPA decided not to move forward with any regulatory changes. *See* http://www.epa.gov/owow/wetlands/guidance/SWANCC/.

traditionally navigable waters could affect more than 76 percent of the state's headwaters or intermittent streams. Missouri ANPRM Comments at 2. Likewise, approximately 75 percent of the stream miles in Texas are intermittent and roughly 48 percent of the NPDES-permitted wastewater discharges flow into such intermittent streams. Texas ANPRM Comments at 2.

Indeed, while there are no definitive estimates of the nationwide impacts from the loss of Clean Water Act coverage for tributary systems and their adjacent wetlands, the numbers are likely quite high. In the New England region alone, EPA estimates that approximately 35,000 miles of non-navigable tributaries (and approximately 2,140,000 acres of their adjacent wetlands and other waters) would lose protection. EPA Region 1 ANPRM Comments at 3. On the other side of the continent, the State of Arizona has estimated that 95 percent of its surface waters are intermittent or ephemeral, all of which would fall outside the narrow definition that Petitioners advance, Arizona ANPRM Comments at 1, and the State of Montana estimates that limiting the definition of navigable waters to perennial or traditionally navigable rivers would eliminate Clean Water Act coverage for 71 percent of the state's stream miles. Montana ANPRM Comments at 4-5. In the nation's heartland, the same concerns hold true; for example, the State of Nebraska estimates that it would lose regulatory oversight of 76 percent of its waterways under even an "extremely conservative estimate" of the reach of a definition change. Nebraska ANPRM Comments at 2. Thus, virtually every region of the country would be significantly impacted by a narrowing of Clean Water Act jurisdiction, and many of the potentially unprotected waters serve as sources of drinking water. *See, e.g.,* EPA Region 3 ANPRM Comments at 6 and Table 1 (demonstrating that between 148 and 526 surface drinking water intakes, serving populations ranging from 535,000 to 3 million people, are in headwaters streams and thus potentially affected by restrictions on Clean Water Act jurisdiction).

Elimination of Clean Water Act jurisdiction over non-navigable tributaries and their adjacent wetlands also would have a significant adverse effect on EPA's enforcement program, calling into question pending wetlands and NPDES enforcement cases. *See* EPA Region 1 ANPRM Comments at 14; EPA Region 9 ANPRM Comments at 12-13 (describing several such vulnerable enforcement actions). For instance, in *United States v. Eidson*, 108 F.3d 1336 (11th Cir.), *cert. denied*, 552 U.S. 899 (1997), a used oil company intentionally pumped industrial wastewater sludge containing priority pollutants into a storm sewer that drained into a storm drainage ditch which eventually emptied into Tampa Bay. The Eleventh Circuit upheld defendants' convictions, citing *Riverside Bayview* and EPA's long-established definition of "waters of the United States" to conclude that non-navigable tributaries to navigable waterways are covered by the Clean Water Act. *Id.* at 1342 (noting that "[p]ollutants are equally harmful to this country's water quality whether they travel along man-made or natural routes"). Similar examples, spanning three decades of remarkable judicial consistency across the country, abound.[8] Petitioners' proposed reading of the term

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[8] *See, e.g., Headwaters, Inc. v. Talent Irrigation District*, 243 F.3d 526, 533-34 (9th Cir. 2001) (discharge of pesticide into irrigation canal without NPDES permit); *United States v. TGR Corp.*, 171 F.3d 762, 764-65 (2d Cir. 1999) (criminal conviction for the knowing discharge, without a permit, of asbestos waste slurry into a drain that flowed into

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"navigable waters" would imperil such enforcement actions and the nation's waters.

There simply is no question that "[n]atural and altered streams can serve as water pollution conduits, whether continuous or intermittent in their flow" and that "[m]an-made structures [such as ditches] . . . have the same practical effect of direct connectivity in being pollution conduits." EPA Region 5 ANPRM Comments at 3. *See also* EPA Region 9 ANPRM Comments at 8-9 (explaining that nearly 20,000 miles of constructed drains and canals in California's Central Valley lie upstream of drinking water supplies for much of the state's population). The loss of section 402 protections for such non-navigable tributaries would set the country's water quality efforts back "to pre-1960's levels." EPA Region 7 ANPRM Comments at 5.

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a channelized brook that flowed into a tributary to the Long Island Sound); *Quivira Mining Co. v. U.S. Environmental Protection Agency*, 765 F.2d 126 (10th Cir. 1985) (uranium mining company discharge of pollutants into short-distance gullies or "arroyos"); *United States v. Texas Pipe Line Co.*, 611 F.2d 345, 347 (10th Cir. 1979) (unpermitted discharge of oil); *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979) (illegal discharge of toxic sodium cyanide-sodium hydroxide solution from gold mine leaching operation into a non-navigable creek); *United States v. Ashland Oil*, 504 F.2d 1317, 1325 (6th Cir. 1974) (conviction for the discharge of oil without a permit into an unnamed, non-navigable tributary where its waters flowed through three other waterways before reaching a navigable river); *United States v. Jones*, 267 F. Supp. 2d 1349 (M.D. Ga. 2003) (discharge to storm drain that flowed into tributary of navigable stream); *State of Georgia v. City of East Ridge*, 949 F. Supp. 1571 (N.D. Ga. 1996) (sewage discharge into storm drain that flowed to unnamed tributary of navigable-in-fact river); *United States v. St. Bernard Parish*, 589 F. Supp. 617 (D.C. La. 1984) (discharge to canal pumped to open water pools adjacent to wetland that was adjacent to navigable river).

C. Other Clean Water Act Provisions Are Similarly Dependent on a Broad Interpretation of Navigable Waters.

Sections 402 and 404 are not the only Clean Water Act programs whose effectiveness turns on the phrase "waters of the United States." For example, section 304 of the Clean Water Act mandates that, for navigable waters, states adopt and EPA approve water quality standards that "protect the public health or welfare [and] enhance the quality of water . . . taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also taking into consideration their use and value for navigation." 33 U.S.C. § 1313(c)(2)(A). Additionally, states must develop "total maximum daily loads" ("TMDLs") for any waters that do not meet these standards and must implement these TMDLs through "waste allocations" incorporated into NPDES permits and their non-point source planning efforts. *Id.* § 1313(d).

Because many NPDES permit holders discharge into tributary streams, a statutory reinterpretation that leaves these streams unregulated will increase the pollutant load in downstream waters, leading to TMDL violations. *See, e.g.,* California ANPRM Comments at 9; Arizona ANPRM Comments at 3; Delaware ANPRM Comments at 14; Rhode Island ANPRM Comments at 1-2. For example, in the Christina River Basin that spans Pennsylvania, Maryland, and Delaware, TMDL modeling and analysis demonstrate that nutrients, dissolved oxygen, and dioxin all move into the river from upstream tributaries and must be controlled at their source to effectuate the clean-up envisioned by section 304. EPA Region 3 ANPRM

Comments at 14-15. *See also* EPA Region 1 ANPRM Comments at 13 (discussing effects on TMDL efforts to restore Long Island Sound).

Many other Clean Water Act programs would be similarly impacted by Petitioners' cramped interpretation of "navigable waters." For instance, section 401, 33 U.S.C. § 1341(a), requires states to certify that applications for federal permits and licences involving discharges into "navigable waters" will comply with the standards of the Clean Water Act. Because states often do not have the legal authority or the resources to step in and directly regulate the destruction of wetlands,[9] many have historically relied on section 401 as the primary mechanism for protecting wetlands and riparian areas. *See, e.g.*, Arizona ANPRM Comments at 3; California ANPRM Comments at 3; Hawaii ANPRM Comments at 3; Indiana ANPRM Comments at 8; Iowa ANPRM Comments at 2; Kentucky ANPRM Comments at 1; Maine ANPRM Comments at 1; Nebraska ANPRM Comments at 4; South Carolina ANPRM Comments at 1; Texas ANPRM Comments at 4; Wyoming ANPRM Comments at 5-6. The oil and hazardous substance discharge liability provisions of the Clean Water Act and the Oil Pollution Act also turn on the definition of "navigable water," 33 U.S.C. §§ 1321(b), 2702(a), as do provisions regulating sewage treatment facility discharges, 33 U.S.C. § 1345(a), and non-point source planning provisions. 33 U.S.C. § 1319(a). Each of these programs is threatened if Petitioners' interpretation is adopted.

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[9] Nebraska, for instance, protects only 2 percent of its wetlands through state programs, Nebraska ANPRM Comments at 4, and South Carolina has no regulatory program in place for 99 percent of its wetlands. South Carolina ANPRM Comments at 1. California, Wyoming, Montana, Arizona, and Texas have no state law in place. Respective State ANPRM Comments at 3, 6, 5, 2, and 4.

"Protection of aquatic ecosystems, Congress recognized, demanded broad federal authority to control pollution, for '[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source,'" *Riverside Bayview*, 474 U.S. at 132-33, and the legislative history of the Clean Water Act plainly evinces Congress' intent to control pollution in both navigable waters "and their tributaries." S. Rep. No. 92-414, at 77 (1972). Because tributary systems and their adjacent wetlands are "inseparably bound up with 'waters' of the United States," they fall within the statute's jurisdiction as already construed by this Court in *Riverside Bayview*, 474 U.S. at 134. *See also International Paper Co. v. Ouellette*, 479 U.S. 481, 486 (1987) (Clean Water Act "applies to virtually all surface water in the country"). *SWANCC* did not overrule *Riverside Bayview* nor did it otherwise alter this fundamental proposition.

II. THE FEDERAL GOVERNMENT'S CONSISTENT INTERPRETATION OF CLEAN WATER ACT JURISDICTION HAS RESULTED IN A ROBUST FEDERAL-STATE PARTNERSHIP FOR PROTECTING WATER QUALITY.

Petitioners contend that the government's application of the Clean Water Act to the facts of these cases "gives the Corps extraordinary power to regulate matters that have traditionally been exclusively reserved for regulation by the States" and "will extend federal authority over an enormous expanse of land." Petitioners' Brief in *Carabell* at 14. Such heated rhetoric incorrectly suggests that the Corps has engaged in an alarming departure from long-established regulatory practices. In truth, however, EPA and the Corps have for decades interpreted the Clean Water Act's jurisdiction to reach tributary systems and their adjacent wetlands, such as the ones at issue here. The Court's decision in *SWANCC* does not dictate a different course now. Petitioners' call to ignore decades of settled judicial interpretation would effect a major shift in regulatory policy and largely leave the states adrift to regulate tributary systems and their adjacent wetlands at their own expense and on an *ad hoc* basis – precisely the failed regime that Congress overrode with passage of the Clean Water Act in 1972.

A. EPA and the Corps Have Consistently Asserted Jurisdiction Over Tributaries and their Adjacent Wetlands for Three Decades.

Soon after enactment of the Clean Water Act, EPA broadly defined "navigable waters" to include all navigable waters of the United States and all tributaries of such waters, as well as interstate waters and a variety of intrastate waters connected to interstate commerce. 38 Fed. Reg. 13,527, 13,529 (May 22, 1973). As then-EPA Administrator Russell Train later explained, "aquatic systems are . . . interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource." *Section 404 of the Federal Water Pollution Control Act Amendment of 1972: Hearings Before the Sen. Public Works Comm.*, 94th Cong., 41 (July 27, 1976) (Testimony of EPA Administrator Russell Train), at App. 15.[10]

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[10] Although EPA's original definition did not expressly identify "wetlands" as "navigable waters," the agency contemporaneously issued a policy statement noting that wetlands "represent an ecosystem of unique and major importance to citizens of this Nation" which require

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After a short-lived, narrower Corps interpretation of "navigable waters" was criticized by EPA[11] and rejected by the courts,[12] today's more comprehensive definition was developed and refined. *See* Lance D. Wood, *Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Waters and to Their Adjacent Wetlands*, 34 Env. L. Rev. 10187, 10211 (2004) (explaining Corps' 1974 actions). Consistent with EPA's regulations and the statute's legislative history, the Corps revised its earlier definition to give the term its "broadest possible constitutional interpretation." 40 Fed. Reg. 19,766 (May 6, 1975) (citing S. Rep. No. 92-1236, at 144 (1972)).[13] That definition, finalized in interim form a few months later, included "[a]ll tributaries of navigable waters of the United States up to their headwaters and landward to their ordinary high water mark," as well as wetlands that are "contiguous or adjacent to other navigable waters." 40 Fed. Reg. 31,320, 31,324-25 (July 25, 1975). Where necessary to protect

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"extraordinary protection." 38 Fed. Reg. 10,834 (May 2, 1973). Accordingly, EPA announced its policy to "preserve the wetland ecosystems and to protect them from destruction through waste water or nonpoint source discharges regarding protection of wetlands" and to "minimize alterations in the quantity or quality of the natural flow of water that nourishes wetlands and to protect wetlands from adverse dredging or filling practices." *Id.*

[11] *See* Letter from EPA Administrator Russell E. Train to Corps Lt. Gen. W.C. Gribble, Jr. (Jan. 15, 1974), at App. 24-27.

[12] *Natural Resources Defense Council, Inc. v. Calloway*, 392 F. Supp. 685 (D.D.C. 1975) (invalidating regulations promulgated at 39 Fed. Reg. 12115, 12119 (April 3, 1974)).

[13] The House Report contained similar language, noting that "[t]he committee fully intends the term "navigable waters" to be given the broadest possible constitutional interpretation." H.R. Rep. No. 92-911, at 131 (1972).

water quality, the Corps District Engineer would determine jurisdiction over intermittent rivers, streams, tributaries, and non-adjacent perched wetlands. *Id.* EPA simultaneously proposed complementary guidance for evaluating dredge and fill permit applications for discharge to wetlands. 40 Fed. Reg. 19,794 (May 6, 1975). EPA explained that the program would protect "wetlands which are especially valuable for propagation and support of fish and wildlife, as well as other beneficial uses . . . [from] capricious development [that is] having a major impact on the aquatic life and wildlife of the United States, and other water uses." *Id.* These guidelines, which mirrored the Corps' regulations, were issued in interim final form a few months later. 40 Fed. Reg. 41,294 (Sept. 7, 1975).

Since adoption of these early implementing regulations, the agencies' interpretation of "navigable waters" has remained remarkably stable. In 1977, the Corps amended the definition of "navigable waters" in order to "make the policies and procedures more understandable to a person desiring to perform work in the waters of the United States." 42 Fed. Reg. 37,122 (July 19, 1977). The 1977 amendment did not expand the Corps' jurisdiction, but merely aimed to resolve confusion as to which waters were subject to jurisdiction, including wetlands adjacent to navigable waters or their tributaries, as well as other waters "the degradation or destruction of which could affect interstate commerce." 42 Fed. Reg. at 37,144.[14]

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[14] The 1977 clarification provided the first definition of "adjacent," defined as "bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'" 42 Fed. Reg. at 37,144.

In 1979, the EPA issued the definition of "waters of the United States" that, with only minor modifications, remains in effect today. 44 Fed. Reg. 32,854, 32,901 (June 7, 1979); 33 C.F.R. § 328.3(a). In 1986, the Corps adopted the EPA definition. *See* 51 Fed. Reg. 41,206, 41,217 (Nov. 13, 1986); 40 C.F.R. § 230.3(s). These definitions largely parallel the original 1975 and 1977 definitions.

In sum, the Corps and EPA have consistently interpreted the jurisdictional reach of the Clean Water Act's integrated and comprehensive pollution control programs, and the courts have largely followed suit. *See, e.g., United States v. Gerke Excavating, Inc.*, 412 F.3d 804 (7th Cir. 2005), *petition for cert. filed*, 74 USLW 3309 (U.S. Nov. 11, 2005) (No. 05-623) (wetlands drained by a ditch that ran into non-navigable creek that ran into non-navigable river, which in turn ran into navigable river are "waters of the United States"); *In re Needham*, 354 F.3d 340 (5th Cir. 2003) (drainage canal adjacent to navigable-in-fact water constitutes "navigable water"); *Treacy v. Newdunn Associates, LLP*, 344 F.3d 407 (4th Cir. 2003) (wetland that drains intermittently into manmade waterway that empties 2.4 miles later into navigable-in-fact water subject to CWA jurisdiction); *United States v. Deaton*, 332 F.3d 698 (4th Cir. 2003) (wetlands adjacent to roadside ditch that eventually empties into navigable-in-fact waters subject to Clean Water jurisdiction); *Avoyelles Sportsmen's League, Inc. v. Marsh*, 715 F.2d 897 (5th Cir. 1983) (wetlands subject to Clean Water Act jurisdiction); *United States v. Byrd*, 609 F.2d 1204 (7th Cir. 1979) (wetlands adjacent to lake are "navigable waters"); *Leslie Salt Co. v. Froehlke*, 578 F.2d 742 (9th Cir. 1978) (Clean Water Act jurisdiction extends at least to waters which are no longer subject to tidal inundation because of dikes). Such contemporaneous and long-standing administrative construction carries special weight. *Fawcus Machine Co. v. United States*, 282 U.S. 375, 378 (1931).

B. If Adopted, Petitioners' Arguments Threaten to Disrupt the Clean Water Act's Cooperative Federalism Scheme and Unduly Burden the States.

The Clean Water Act, as originally drafted and subsequently implemented, does not impinge on any traditional area of state regulation, but rather, constitutes a classic example of cooperative federalism. The statute manifests Congress' embrace of a "partnership between the States and the Federal Government, animated by a shared objective: 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'" *Arkansas v. Oklahoma*, 503 U.S. 91, 101 (1992) (quoting 33 U.S.C. § 1251(a)). By its explicit terms, the statute preserves and allocates substantial roles to state governments, but also provides for federal regulation of polluting activity. *See* 33 U.S.C. § 1342(b) (giving states the presumptive right to take over administration of the Act's discharge permit program); 33 U.S.C. § 1342(g) (similarly giving states the presumptive right to take over the federal "dredge and fill" program); 33 U.S.C. § 1370 (setting forth savings clause preserving state authority to protect waters more stringently than federally required). In many states, including the one at issue here, the federal-state partnership envisioned by Congress has become a working reality over the last thirty years, with federal and state water protection laws integrated into one "seamless" and streamlined regulatory process, reducing permit application costs and time. *See, e.g.*, Michigan ANPRM Comments at 14;

Delaware ANPRM Comments at 15; Vermont ANPRM Comments at 2.

Given these long-established regulatory relationships, many states oppose the shrinking of federal protection over the nation's waters. As Nebraska explained to EPA, "staggering economic difficulties for the states mean the additional burden would strain state resources and dramatically reduce our ability to protect the waters of the State." Nebraska ANPRM Comments at 1. *See also* Arizona ANPRM Comments at 3 ("Given the ongoing budget concerns of our state and many others, creation of such programs and partnerships is unlikely in the near future"); Montana ANPRM Comments at 5 ("A Federal basis of support for implementation of water quality protection efforts in Montana is critical in light of the state's limited regulatory resources."). Other states have expressed similar views. *See, e.g.,* California ANPRM Comments at 9; Maine ANPRM Comments at 1; North Carolina ANPRM Comments at 6; Wyoming ANPRM Comments at 5. To overturn thirty years of settled expectations here would, in effect, impose an enormous unfunded mandate on the states.

Even in the absence of budgetary woes, other practical constraints prevent states from filling EPA's and the Corps' regulatory shoes. In some states, regulatory agencies are actually forbidden from imposing any regulations stricter or more extensive than federal regulations. *See, e.g.,* Texas ANPRM Comments at 4. Elsewhere, the withdrawal of federal jurisdiction likely means that "a patchwork quilt of uneven regulations will threaten overall water quality." Indiana ANPRM Comments at 1-2. Moreover, the states themselves recognize that without the "level playing field" created by the Clean Water Act, many states will feel economic pressure to engage in a race to the bottom, loosening water regulations to compete with other states. Delaware ANPRM Comments at 14; Tennessee ANPRM Comments at 2-3. But even individual states with adequate resources, legal authority and the political will to fill the void cannot regulate beyond their own boundaries, a serious limitation in the integrated watersheds of North America where virtually every state is affected by upstream polluting activities in another jurisdiction. There is thus no compelling reason for the Court to rewrite the statutory federal-state balance struck by Congress.

III. PETITIONERS' REAL ESTATE DEVELOPMENTS AND THE ACT'S PROTECTIONS BOTH IMPLICATE COMMERCIAL ACTIVITIES, OVERCOMING CLAIMED COMMERCE POWER CONCERNS.

These cases do not implicate legitimate constitutional concerns. The pervasively commercial real estate development activities at issue in *Rapanos* and *Carabell*, the Clean Water Act's protections of commercial activities dependent on America's waters, and the Corps' underlying regulatory judgments about Petitioners' impacts on water quality easily satisfy any constitutional test linked to the Commerce Clause. Petitioners' plans are reachable under both the "channels of interstate commerce" and the "substantially affect" interstate commerce rationales. They also involve "Necessary and Proper" assertions of federal power to protect legitimate federal interests.

First, unlike the isolated, unconnected waters at issue in *SWANCC*, the waters in these cases are protectable as part of the "channels of interstate commerce." *See United*

States v. Lopez, 514 U.S. 549, 558-59 (1995). Petitioners' actions involve the filling of wetlands that are proximate or directly connected to tributary ditches which act as conduits to traditional navigable-in-fact waters. The degradation of small stream tributaries can collectively harm agricultural, municipal, and riparian uses of such waters, as well as innumerable businesses dependent on interstate travelers who seek pristine fishing streams, small boat recreation, and swimming opportunities in waters often miles from traditional "navigable-in-fact" waters. *See, e.g.,* EPA Region 10 ANPRM Comments at 4-5. As Judge Posner observed in the factually similar *Gerke* case, "the sum of many small interferences with commerce can be large, and so to protect commerce Congress must be able to regulate an entire class of acts if the class affects commerce, even if no individual act has a perceptible effect." *Gerke,* 412 F.3d at 806 (citations omitted).

Under the "channels" rationale, this Court has long recognized federal power to "insure the convenient and safe navigation of all the navigable waters of the United States," including efforts to "remov[e] . . . obstructions to their use." *The Daniel Ball,* 77 U.S. 557, 564 (1871). *See also United States v. Appalachian Electric Power Co.,* 311 U.S. 377, 405 (1940) ("To make its control effective the Congress may keep 'the navigable waters of the United States' open and free and provide by sanctions against any interference with the country's water assets."). This power reaches to activities in non-navigable waters necessary to protect navigable-in-fact waters. *See Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.,* 313 U.S. 508, 525 (1941) (recognizing federal power under the Commerce Clause to reach watersheds due to their link to "flood control on navigable streams and their tributaries"). Once "channels of interstate commerce" are implicated, congressional power can be asserted to "keep the channels of interstate commerce free from immoral and injurious uses," even where a defendant's conduct is itself not commercial. *Caminetti v. United States,* 242 U.S. 470, 491 (1917).

Second, under the third category of Commerce Clause power analysis, the federal government also has "the power to regulate those activities having a substantial relation to interstate commerce, *i.e.,* those activities that substantially affect interstate commerce." *Lopez,* 514 U.S. at 558-59. As the Court recently explained, Congress can even regulate "purely intrastate activity that is not itself 'commercial,' in that it is not produced for sale, if it concludes that failure to regulate that class of activity would undercut the regulation of the interstate market in that commodity." *Gonzalez v. Raich,* 125 S. Ct. 2195, 2206 (2005). In assessing federal power under a category three Commerce Clause analysis, the Court looks to the particular activities being regulated as well as the commerce-related activities protected by the statute. *See, e.g., Raich,* 125 S. Ct. at 2209 (distinguishing *Lopez*, which involved a "brief, single-subject statute making it a crime for an individual to possess a gun in a school zone"); *United States v. Morrison,* 529 U.S. 598, 610 (2000) (explaining that "the noneconomic, criminal nature of the conduct at issue" in *Lopez* was "central" to the Court's decision there). In the recent *Raich* case, for example, the Court focused on how Congress' comprehensive regulation of the illegal drug market implicated commerce in numerous ways, contrasting the statute in *Morrison*, whose focus on gender-motivated crimes of violence "did not regulate economic activity." *Raich*, 125 S. Ct. at 2210-11.

The Clean Water Act's explicit text calls for Commerce Clause analysis of the activities causing harm, here polluting conduct, as well as commercial and economic activities dependent on the "chemical, physical and biological integrity" of America's waters. 33 U.S.C. § 1251(a). The factual setting of *Rapanos* and *Carabell,* where commercial real estate developers sought to fill wetlands for profit, undoubtedly involves the sorts of economic and commercial activity so completely lacking in *Lopez* and *Morrison.* Moreover, as the Court recognized in *Riverside Bayview,* adjacent wetlands and tributaries such as those at stake here fulfill numerous commercially and economically significant "hydrological" functions, thereby overcoming any commerce power objections. *See also Gerke,* 412 F.3d at 806-08 (rejecting similar constitutional attack and stating the "power of Congress to regulate pollution is not limited to polluted navigable waters"); *Deaton,* 332 F.3d at 704-08 (finding fill of wetlands flowing into ditch threatened "aggregate effects" with other similar actions and was reachable because action implicated "channels of interstate commerce"); *Gibbs v. Babbitt,* 214 F.3d 483 (4th Cir. 2000) (analyzing the harmful activities regulated, the activities contingent on regulatory protection, and the need to reach intrastate activities as an essential part of a larger regulation of economic activity).

Regulation of the class of pollution discharges at issue here lies within the government's Commerce Clause power because it is part and parcel of a "comprehensive" regulatory scheme intended to control polluting harms and protect the manifold uses of America's waters. *Raich,* 125 S. Ct. at 2206 ("the *de minimis* character of individual instances arising under [the] statute is of no significance"). As it did in *Raich,* the Court should decline entreaties to "excise individual applications of a concededly valid statutory scheme." *Id.* at 2209. These cases are unlike *Lopez* and *Morrison,* where the parties asserted that a particular statute or provision fell outside Congress' commerce power in its entirety. *Id.*

Finally, the federal government also can protect downstream commercial and economic uses of waters pursuant to the Necessary and Proper Clause, which allows "Congress 'to take all measures necessary or appropriate to' the effective regulation of the interstate market, 'although intrastate transactions . . . may thereby be controlled.'" *Raich,* 125 S. Ct. at 2218 (Scalia, J., concurring). Congress has the power to "facilitate interstate commerce by eliminating potential obstructions, and to restrict it by eliminating potential stimulants," even where the activity is "noneconomic." *Raich,* 125 S. Ct. at 2216, 2217 (Scalia, J., concurring) (citing *NLRB v. Jones & Laughlin Steel Corp.*, 301 U.S. 1, 36-37 (1937)).

Petitioners' constitutional arguments thus rest in their entirety on taking a few clauses in *SWANCC* out of context, while virtually ignoring *Raich,* and claiming, in effect, that *SWANCC* rewrote well-established Commerce Clause precedents. The *SWANCC* Court alluded to potential Commerce Clause concerns under its particular facts, but declined to analyze the "object or activity that, in the aggregate, substantially affects interstate commerce," apparently questioning the timeliness of government arguments. *Id.* at 173. In light of constitutional concerns, the *SWANCC* Court merely read the statute as not encompassing regulation under the "Migratory Bird Rule." *Id.* at 173-74. The cases now before the Court, in contrast, do not involve isolated ponds, and do not now rely on the

Migratory Bird Rule, but involve private commercial real estate development, with fill into "adjacent wetlands" and tributaries that are significantly different in their locations and commercial functions from the isolated *SWANCC* waters. Much as this Court in *Hodel v. Virginia Surface Mining & Reclamation Ass'n,* 452 U.S. 264, 275-83 (1981), rejected a Commerce Clause attack on a federal mining law because that law involved underlying commercial activity causing harms, market competition that could spur destructive activity, and many beneficial uses of resources potentially threatened by mining harms, the Court should similarly reject Petitioners' misguided constitutional arguments here.

IV. AS THE COURT RECOGNIZED IN *RIVERSIDE BAYVIEW*, DEFERENCE TO THE AGENCIES' REGULATORY INTERPRETATIONS AND ECOLOGICAL JUDGMENTS IS WARRANTED.

Petitioners' claims boil down to an attack on the statutory interpretations and regulatory judgments of the Corps and EPA. Those agency judgments consist of both longstanding regulatory interpretations and site-specific assessments about Petitioners' particular lands, waters, and planned activities. It is for the implementing agencies, not the courts, to define the "precise bounds of regulable waters" by exercising their "ecological judgment about the relationship between waters and their adjacent wetlands." *Riverside Bayview*, 474 U.S. at 134. The exercise of that ecological judgment is precisely what occurred in these cases. As it did in *Riverside Bayview*, the Court should defer to the agencies' scientific judgments and "technical expertise" about "biological functions" and the "aquatic environment" under the principles set forth in *Chevron*

U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837, 842-45 (1984). *Id.* at 131, 134.

Petitioners advance two slightly different, but equally unpersuasive, rationales for overriding the Court's prior conclusion in *Riverside Bayview*. In *Rapanos*, Petitioners argue that some greater hydrologic connection than the one determined by the Corps to exist in this instance is necessary to establish Clean Water Act jurisdiction. They posit that a closer geographic proximity between tributaries and downstream navigable-in-fact waters is required, but they offer neither an appropriate test for determining acceptable proximity nor any legislative, regulatory or judicial support for their position. In reality, the hydrologic connection that the Court discussed at length in *Riverside Bayview* was not spatial or geographic, but functional. *See Riverside Bayview*, 474 U.S. at 132-35. If the courts begin usurping the proper role of the agencies in determining these functional hydrologic connections at particular sites, they will likely find themselves in the line-drawing business for many years to come.

The *Carabell* Petitioners pursue a different tack, asking the Court to second-guess the ecological judgment of the Corps with respect to the ability of their man-made berm to isolate an admittedly adjacent wetland and thereby cut off Clean Water Act jurisdiction. This Court firmly rejected such a case-by-case approach in *Riverside Bayview*, upholding agency jurisdiction over the *class* of adjacent wetlands because the Corps "has concluded" that such wetlands "*may function* as integral parts of the aquatic environment." *Riverside Bayview*, 474 U.S. at 135 (emphasis added). The Court was untroubled that some adjacent wetlands might not be "significantly intertwined with the ecosystem of adjacent waterways." *Id.* at 135, fn.9.[15] It was enough that such waters *"tend* to drain" into waters, *"may serve* to filter and purify water draining into adjacent bodies of water," or *"may serve"* important biological functions. *Id.* at 134-35 (emphasis added). The Court's holding in that case and the basic principles of *stare decisis* dictate the same result here.

◆

CONCLUSION

The decisions of the Sixth Circuit Court of Appeals in these consolidated cases should be affirmed in their entirety.

Dated: January 13, 2006

Respectfully submitted,

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[15] If in any particular case the filling of an adjacent wetland will not appreciably impact water resources, the developer can simply obtain a section 404 permit and proceed.

App. 1

SECTION 404 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

HEARINGS
BEFORE THE
COMMITTEE ON PUBLIC WORKS
UNITED STATES SENATE
NINETY-FOURTH CONGRESS
SECOND SESSION

JULY 27 AND 28, 1976

SERIAL NO. 94-H49

Printed for the use of the Committee on Public Works

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SECTION 404 OF THE FEDERAL WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972

TUESDAY, JULY 27, 1976

U.S. SENATE,
COMMITTEE ON PUBLIC WORKS,
Washington, D.C.

The committee met at 7:12 p.m., pursuant to call, in room 4200, Dirksen Senate Office Building, Hon. Jennings Randolph (chairman of the committee) presiding.

Present: Senators Randolph, Muskie, Burdick, Hart, Baker, and Domenici.

OPENING STATEMENT OF HON. JENNINGS RANDOLPH, U.S. SENATOR FROM THE STATE OF WEST VIRGINIA

Senator RANDOLPH. Good evening, ladies and gentlemen.

The Committee on Public Works this evening and also tomorrow evening will conduct two hearings on a difficult subject as we review the environmental problems with which the Congress is faced.

We hope to further our understanding of the problem or problems and to receive recommendations for an effective resolving of these issues.

The situation has arisen, as members of the committee know, from the Water Pollution Control Act Amendments of 1972, section 404 of that legislation requires the Army Corps of Engineers to issue permits for the disposal of dredge and fill material in our navigable waters.

When we wrote the act, we were concerned primarily or even solely with controlling the way in which these materials were disposed. Dredge and fill materials often are highly contaminated, and thus a situation should be addressed in the terms of water pollution control.

All the members of the committee have expressed an interest in this subject, and we are appreciative that many of them arranged their schedules to be here tonight.

We did not understand earlier that a judicial decision would subsequently broaden the impact, as I have referred to it, of section 404. As a result of the action in the courts, the Corps of Engineers has set down regulations covering an extensive range of activities. These are proposed to be implemented in three phases. The first phase has already gone into effect. The regulations covering phase two were to have been implemented on July 1, but were ordered postponed by the President pending action in the Congress.

These hearings have been planned by the committee to review the implication of the Corps of Engineers' regulations. Legislation has been adopted by the House of Representatives, and there are proposals pending in the Senate.

The witnesses counseling with us during these two evenings represent a broad spectrum of affected parties. I am sure all members of the committee welcome the opportunity to hear the witnesses and discuss with them in dialog the problems that we know are necessary to be discussed. The exchange, I am sure, between members of the committee and those who testify will be helpful, as well as the formal statements.

Senator Robert Dole of Kansas is at the witness table. We are prepared to hear his testimony at this time.

Are there comments from members of the committee? Senator Muskie?

OPENING STATEMENT OF HON. EDMUND S. MUSKIE, U.S. SENATOR FROM THE STATE OF MAINE

Senator MUSKIE. I have a brief statement which I hope will be helpful. I had hoped that the Senate could defer until next year consideration of the substantive issues associated with the 1972 Clean Water Act.

Unfortunately, much of the debate, much of the regulations, and much of the suggested legislative responses stem from what I regard as a misinterpretation of congressional intent.

Section 404 is designed to require the corps, because of their existing authority to maintain navigation, to regulate the dumping of polluted dredge spoil at specified disposal sites, the EPA having veto power over the selection of the sites. That was the intent precisely and specifically stated.

Section 404 was an exception to the otherwise comprehensive regulatory program embodied in section 402. But implementation of section 404 has not led to the end of open water dredge spoil discharge, which was the specific objective of section 404.

No specified disposal sites have been established. Instead, the section 404 regulations have led to confusion, irritation, and divisiveness that have undermined the confidence in the basic Federal role in water pollution control.

They have created a perception of needless interference in the affairs of farmers, foresters, miners, and ranchers whose activities were by no means comprehended as coming under the section of 404 when it was written.

At this point, the most appropriate course of action for this committee may be to strike section 404, eliminate this exception, and return to the basic regulatory structure anticipated by the act.

If we adopted this course, dredge, spoil, and fill would be considered pollutants. Where they are discharged, they would be regulated by the Environmental Protection

Agency or the States. Where they are nonpoint sources, they would be regulated by the States pursuant to section 208. This was the original position of the Senate in 1972.

Given all the problems that section 404 has created, perhaps it should be in its saddest position now. I am not wedded to this position, My mind is open, whatever my emphasis may indicate to the contrary.

I hope the statements of our witnesses will help clarify these issues and provide us with a course of action which will preserve our ability to regulate the disposition of polluted dredge spoil without creating another unnecessary duplicated Federal regulatory program.

Senator RANDOLPH. Thank you Senator Muskie, for your continuing leadership on the committee. We are grateful as members of our committee and the Senate as well.

Senator Baker, do you have any comments?

Senator BAKER. Mr. Chairman, I have no prepared statement at this time. Possibly I will have suggestions to make as we proceed. But I prefer to hear the testimony of the witness.

Senator RANDOLPH. Thank you, Senator Baker.

Senator Hart?

OPENING REMARKS OF HON. GARY HART, U.S. SENATOR FROM THE STATE OF COLORADO

Senator HART. Mr. Chairman, I have no prepared statement. As with other members of the Senate, I have my own proposal which I will be discussing with this committee and perhaps the full Senate on section 404 to deal with problems that Senator Muskie has so articulately identified.

It is a classic of a case that all of us in the Congress are faced with time and time again: the congressional intent and administrative implementation, between which there seems to be a gap.

The people of the country are upset. We are upset. Somehow the Congress and the executive branch must get together on the laws that are passed and implemented to free the people of this country from what they definitely consider to be burdensome regulations.

I think all of us have the same intent. We are here to try to solve that problem.

Senator RANDOLPH. Thank you, Senator.

Senator Domenici?

Senator DOMENICI. I have no comments, Mr. Chairman. Thank you.

Senator RANDOLPH. For the record, Governor Marvin Mandel of the State of Maryland had indicated to the committee that he would appear this evening and would address himself to the subject matter, not as a Governor of that State but for the National Governors' Conference.

The change of time and other commitments made it impossible for Governor Mandel to be with us tonight. He has submitted testimony which will be a part of our record. Did the Governor provide copies so that they might be available to those who will be covering the hearing or interested parties? Do you have knowledge of that?

Mr. MEYER.[1] Yes, sir.

Senator RANDOLPH. There are copies, then.

[The statement of the National Governor's Conference follows]

* * *

Russell Train, Nathaniel Reed, Victor Veysey, and Peter Taft – are men of stature. They are men who have certain authority and leadership which we all recognize, I am sure that their testimony will bring forth colloquy which will help to bring out the points of view they present.

Would you gentlemen please come forward as a panel?

Thank you, gentlemen.

Off the record.

[Discussion off the record.]

Senator RANDOLPH. The members of the panel, as I have indicated, are men of stature and leadership. Mr. Train, would you proceed to give us your thinking as the Administrator of the Environmental Protection Agency?

STATEMENTS OF RUSSELL TRAIN, ADMINISTRATOR, ENVIRONMENTAL PROTECTION AGENCY; NATHANIEL REED, ASSISTANT SECRETARY OF THE INTERIOR FOR FISH AND WILDLIFE AND PARKS; VICTOR VEYSEY, ASSISTANT SECRETARY OF ARMY FOR CIVIL WORKS ; AND PETER TAFT, ASSISTANT ATTORNEY GENERAL FOR LAND AND NATURAL RESOURCES

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[1] Mr. Barry Meyer, Chief Counsel, Senate Public Works Committee.

Mr. TRAIN. Thank you, Mr. Chairman and members of the committee. I have what at least seems to me in comparison to some of the other statements a relatively short statement. Since I come first, I propose to read the full statement, with your permission. Since Governor Mandel is not appearing, perhaps I can use, part of his time, although we may not say the same thing.

I am here today to discuss with you our continuing efforts to achieve the goals of the Federal Water Pollution Control Act in the context of one specific program – the regulation of discharges of dredged or fill material under section 404.

Needless to say, I am just delighted that this committee has called this hearing. I think that this has been long overdue. The issues are complex. They need resolution. I think the fact that the committee is willing to gather at this late hour to take up this issue is just extraordinarily commendable. The amount of interest which is evident in the size of the audience here I think speaks to the importance of the issue in the public mind.

With the passage of the 1972 amendments to the FWPCA, our fundamental objective became the restoration and maintenance of the chemical, physical, and biological integrity of the Nation's waters.

Full implementation of the 404 decisionmaking process is imperative if we are to achieve that goal. Section 404 represents an essential tool for moderating the degradation, and sometimes the irrevocable destruction, of aquatic areas that naturally control the quality of water, including those vital areas of shallow water known as wetlands.

I might add that if we did not have those wetlands, the course of abating pollution in this country by industry and municipalities would be enormously increased because of the additional costs that would be required by the technology to take the place of what nature has provided us.

We welcome the opportunity to participate in dispelling the widespread misinformation that continues to impede constructive debate on this program.

I will direct my brief remarks to three concerns: First, the origin of the program and the much talked about concept of "broad jurisdiction over water"; second, a few of the ecological realities that compel Federal jurisdiction over water; and finally, I will highlight the encouraging first year of implementing a program that is designed to overregulation.

The Federal Water Pollution Control Act places the responsibility upon EPA to administer a permit program for industrial and municipal discharges. The act reserves to the Corps of Engineers a separate permit program under section 404 for discharges of dredged or fill material into the Nation's waters.

The statutory language authorizing the 404 program requires the cooperation of the corps and EPA to insure that discharges of dregded [sic] material and fill material will not have unacceptable adverse effects on municipal water supplies, shellfish beds, fisheries, wildlife, and recreation.

A fundamental element of the Water Act is broad jurisdiction over water for pollution control purposes. Several Federal courts have endorsed the wisdom, and constitutionality, of this committee's observation that:

> Water moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source. Therefore, reference to the control requirements must be made to the navigable waters, portions thereof, and their tributaries.

In affirming the constitutionality of the statute's jurisdiction over all the Nation's waters in the Ashland Oil opinion, the Court of Appeals for the Sixth Circuit observed:

> We believe that the language of the Federal Water Pollution Control Act and its legislative history show that the United States Congress was convinced that uncontrolled pollution of the Nation's waterways is a threat to the health and welfare of the country, as well as a threat to its interstate commerce.
>
> Obviously water pollution is a health threat to the water supply of the Nation. It endangers our agriculture by rendering water unfit for irrigation. It can end the public use and enjoyment of our magnificent rivers and lakes for fishing, for boating, and for swimming. These health and welfare concerns are, of course, proper subjects for Congressional attention because of their many impacts upon interstate commerce generally. (*United Slates v. Ashland Oil*, 7 ERC 1114, 1120 (6th Cir., 1974).)

The court recognized that comprehensive jurisdiction is necessary not only to protect the natural environment but also to avoid creating unfair competition. Unless Federal jurisdiction is uniformly implemented for all waters, dischargers located on nonnavigable tributaries upstream from the larger rivers and estuaries would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors.

Thus, artificially limiting the jurisdiction can create a considerable competitive disadvantage for certain discharges.

Let me add at this point, Mr. Chairman, that the administration supports the approach of maintaining broad jurisdiction under this program, as set forth under the so-called Cleveland-Harsha amendment offered in the other House, with appropriate amendments.

I believe Mr. Veysey will be prepared to go into more detail on this. But let me just mention in passing that such amendments should provide for delegation to the States under carefully drawn criteria. They should provide for authorization to the Corps of Engineers to exclude insignificant activities. They should insure that permits will only be denied on the basis of adverse impacts on fish and wildlife or other water quality concerns. They should exempt inuse agricultural or silvicultural activities, as would be carefully defined in detail in legislative language.

Mr. Chairman, continued applicability of the 404 program to our Nation's waters is essential if we are to moderate the two most significant types of harm caused by dredged or fill material.

First, just as water uses are degraded by industrial and municipal wastes, adverse effects also occur from dredged and fill materials that contain a wide range of pollutants, including toxic substances.

An initial screening of sediments from over 700 harbor and waterway locations showed that sediments in over half of the locations contained a significant pollutant load. Pollutants identified in the sampling included lead, arsenic, cyanide, PCB's, mercury, and cadmium.

Contaminated materials threaten water supplies, fisheries and other beneficial water uses unless carefully managed. The corps and EPA are currently using the 404 decisionmaking process to assess the risk of dredging James River sediments that are contaminated with Kepone.

It is important to understand that toxic substances threaten the aquatic environment when discharged into small streams or into major waterways. Similarly, pollutants are available to degrade water and attendant biota when discharged in marshes and swamps, both below and above the mean and ordinary high water marks.

Second, unlike most industrial and municipal pollution, dredged and fill material can physically destroy essential parts of the aquatic system, including swamps, marshes, submerged grass flats and shellfish beds. These critical aquatic areas are essential to many water uses, not the least of which is a viable commercial and sports fishery.

Wetlands serve as spawning and nursery areas while providing natural control of organic and inorganic nutrient transfers that dictate quantity and quality of life in the water. The declining availability of swamps, marshes, and free-flowing streams to assimilate pollution from point and nonpoint sources will greatly increase the dollar and energy costs of maintaining desirable water uses.

For example, discharge of fill material into certain swamps in New York and New Jersey can affect the quantity and quality of water seeping into the aquifers from which many communities draw their water supply, thereby naturally causing increased treatment costs.

We testified in the July 1975 hearings before the House Subcommittee on Water Resources that the Army Corps of Engineers and EPA had agreed to cooperate in establishing a joint program.

Shortly thereafter, interim final regulations were promulgated by the corps on July 25, 1975. These regulations were followed by the publication of interim final guidelines by EPA on September 5, 1975.

Together the regulations and guidelines establish a manageable program that focuses the decisionmaking process on significant threats to aquatic areas while avoiding unnecessary regulation of minor activities.

The first year of implementation of the 404 program ended just last Sunday. In view of the attention that has been given to this program in recent months and the misunderstandings that have been voiced by various interest groups, I want to discuss briefly the key features of the program that are preventing overregulation.

First, comprehensive jurisdiction is, we believe, essential for the protection of the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrealted [sic] and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource.

Moreover, this broad geographical jurisdiction should reduce the confusion and expense inherent in earlier jurisdictional approaches that established artificial and often arbitrary boundaries that included only part of some bodies of water.

For example, the old jurisdictional mean high water line excluded one-half to one-third of most coastal marshes, thus possibly allowing destruction of an essential element of the aquatic system, depending on the degree of control exercised by the States.

Today this problem has been eliminated. The location of a coastal marsh by using the aquatic vegetation line accurately identifies most marsh areas. One Florida developer informed us that with the new approach, the location of coastal marshes is less time consuming and less expensive. No longer is it necessary to expend thousands of dollars for tide experts and surveyors to establish the exact mean high water mark as required by the old Corps program.

Second, let me emphasize that while the geographical jurisdiction of the program is broad, hundreds of activities have been identified which do not require permits. The term "fill material" has been defined so as clearly to exclude normal farming, silvictulure [sic] and ranching activities such as plowing, cultivating, seeding, and harvesting. Maintenance of existing fill has also been excluded.

We hope this hearing will help us reassure the public that many activities simply do not require permits.

Third, the 404 program will use general permits to the maximum extent possible to authorize categories of discharge that cause only minimal harm to water quality.

Thus, the need for dischargers to apply for individual permits is eliminated except in those instances involving environmentally significant activities. Several districts have already issued general permits to authorize erosion control bulkhead and fill and for fills associated with highways and log roads.

Several of our regions have reported a sharp decrease in the number of public notices for permits for insignificant activities under both the 404 program and the 1899 Rivers and Harbors Act.

Fourth, phased implementation of the broad jurisdiction over water has provided a measure of moderation and flexibility we all see as necessary to a reasonable program. A commendable management effort by the Corps of Engineers has already resulted in improved coordination with EPA, other Federal and State agencies, and the public.

I would like to emphasize, I think the Corps has done an outstanding job in moving this program forward and developing reasonable and manageable regulations. You certainly can explore that more fully with them. But I want this committee to know that EPA is strongly supportive of the Corps' effort in this regard and believe that they really have done an outstanding job.

Finally, considerable effort has been made in developing a 404 program that would directly involve the States in the decisionmaking process. Several States with existing permit programs to regulate the same types of activities that are regulated under section 404 are taking advantage of the opportunity to participate in the joint processing Federal-State permit applications.

Iowa, Michigan, and Maryland are notable examples. I believe this opportunity to establish joint programs will encourage needed improvement in many States that have not yet adequately addressed environmental problems caused by discharging dredged or fill material into the water environment.

To conclude my remarks, let me emphasize that the protection of water quality must encompass the protection of the interior wetlands and smaller streams.

In this regard, I should remind you that through the International Convention on the Prevention of Marine Pollution by the Dumping of Wastes and Other Matter and our own Ocean Dumping Act of 1972, the United States has established both international and domestic programs to protect the oceans from uncontrolled discharges of sludges and dredged material.

The criteria for permitting the ocean dumping of dredged or fill material are, by design, consistent and very similar to those issued under section 404(b). Without an appropriate and effective program under section 404, only ocean dumping of dredged material will be closely regulated while many of our more productive and more limited inland water resources will be unprotected from both chemical and physical degradation.

The Department of the Interior has estimated that almost half of the wetlands which originally contributed to aquatic resources of our Nation have already been lost through draining, dredging, or filling.

Even with numerous programs aimed at their preservation, in excess of 25,000 acres of prime wetlands are lost each year. Our most productive aquatic systems have already been drastically reduced from their original 127 million acres to less than 80 million acres.

As you know, wetlands are a priceless, multiuse resource. They perform the following services:

One: High yield food source for aquatic animals;

Two: Spawning and nursery areas for commercial and sports fish;

Three: Natural treatment of waterborne and airborne pollutants;

Four: Recharge of ground water for water supply;

Five: Natural protection from floods and storms; and

Six: Essential nesting and wintering areas for waterfowl.

We should be mindful of the fact that when these areas are polluted out of existence, we will have lost the very valuable free service of nature; and if toxic-laden dredged or fill material is discharged into wetlands, we risk poisoning the very foundation of our aquatic system.

I must caution against expedient short-term considerations relating to the section 404 program, however compelling they may seem, in view of the long-term consequences associated with any such actions. What we do now affects not only the next decade but our next generation, and those that follow.

I mentioned at the beginning, Mr. Chairman, that there has been a lot of misinformation about this program. We believe the program has been managed in a way to avoid the kind of problems that you rightly are concerned about and that many members of the public are concerned about.

I am also concerned that misinformation and misguided advice has been put forward not on behalf of those frequently referred to, such as small farmers who we believe are totally excluded from the scope of these regulations, but by those who wish to dredge and fill and develop wetlands to make a fast buck, if you will, at the expense of a long-term public interest.

I make that statement with full concern for the complexity of the problem. But I think that the wetland resource of this Nation is so vitally important to all of us that I would urge and beg this committee and the Congress to legislate in this area with the utmost care.

Again I commend the committee for conducting this hearing.

Senator RANDOLPH. Thank you very much, Administrator Train. If agreeable to the members of the committee, I would suggest that we have our four panelists give their presentation and then we go to the questioning.

Senator MUSKIE. Could I ask one question? I agree with that, Mr. Chairman. Could I ask one question simply to fill in on the history of the thing so it is clear?

Senator RANDOLPH. Yes.

Senator MUSKIE. The regulations which you have described, Mr. Train, are those issued a year ago this summer. What created the initial storm in section 404 was the policies that the Corps of Engineers announced in a press release issued after the court opinion; is that not so?

Mr. TRAIN. I believe that is correct. Mr. Veysey should answer that.

Senator MUSKIE. In other words, what created the initial storm of public opinion was a policy announced before you moved in, or somebody moved in, to redefine the policy in a more careful way you have described.

If the Corps had not, in other words, moved as it had with what I thought was distortion of legislative intent and created all of the reaction, you would not have had to move in as sort of the wet nurse to try to bring the storm under control.

That is the context in which your regulations were issued, as I recall. You may not, use the rhetoric that I just used, but isn't it a fact –

Mr. TRAIN. I think I will ask Mr. Veysey to respond to the question.

Senator MUSKIE. Isn't it a fact that the public relations problem which has brought all these people into this room at a late hour in the night, stirred up an issue by a release issued by the Corps of Engineers following the court opinion, before the careful definition of the regulations which you have described?

I wrote you a letter myself in that interim.

Mr. TRAIN. I remember practically the day that was issued. I was before another Senate committee on another matter. I was immediately confronted. In fact, I hadn't read the release at that time. And there was no question that the release contributed to a climate of public concern over the issue.

Senator MUSKIE. It didn't contribute; it created.

Mr. TRAIN. But I would say that the Corps of Engineers was by no means the only instrument for increasing public concern over the program.

Senator MUSKIE. I understand the Secretary of Agriculture participated.

Mr. TRAIN. Yes.

Senator MUSKIE. The Secretary of Agriculture, I think, cooperated very well with the Corps of Engineers. I just wanted to make that point because after your description, it sounded as though the problem had started with the regulations, where it actually started before.

If it had started with the regulations, conceivably there might not be a problem.

But the impression created by the release of the Army Engineers is still creating ripple effects in every State that is affected by the problem, and I suspect many of the refinements of your regulations have not yet caught up with those ripple effects to help abate the storm. That is my only point.

Mr. TRAIN. I must say I suspect that those who feel that their interests are threatened by 404 would have created a public storm over this issue, irrespective of any possible contribution from that press release.

Senator MUSKIE. We will make our independent judgments about that.

Mr. TRAIN. I wouldn't want to point a finger to the Congress on that. In any event, that is water over the dam.

Senator MUSKIE. Was the dam built with a permit?

Mr. TRAIN. I think with that I shall yield.

STATEMENT OF VICTOR VEYSEY, ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS

Mr. VEYSEY. Mr. Chairman, if I might, I would like to respond in part to Senator Muskie's question, which I think is an appropriate one.

Since there is no part of that included in my testimony, I welcome the opportunity to insert it at this point. It is true, it is a sad fact, that sometime in the early hours on a long weekend when folks in the Corps of Engineers had been struggling with this problem, perhaps too long, a very misguided and very unfortunate press release was issued which said, if read very carefully, that under this law, many things might happen. That was before the regulations were written.

In a sense, it was true that a lot of things might happen, although there was no intent on the part of the Army Corps of Engineers or EPA to let any of those things happen. But the damage was done, as you point out so correctly. That stirred or perhaps struck a sympathetic note – I don't know which – but anyway, the release was issued from the Public Information Office of the Corps of Engineers. I guess we will never be permitted to forget that.

Senator MUSKIE. Neither will we.

Mr. VEYSEY. I regret very much that it did happen. After that time we took a rather firm grip on the situation.

I will say that with magnificent cooperation from Russ Train and all of his people at EPA, and the Interior and the Justice Depart-

* * *

[LOGO] UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN 19 1974

THE ADMINISTRATOR

Dear General Gribble:

As you are undoubtedly aware, on March 13, 1974, the U.S. District Court for the Middle District of Florida issued a Memorandum Opinion in *United States v. Holland*. In that case, the United States sought to enjoin disposal without a permit of dredged material in wetlands which were above the mean high water line but were periodically inundated by tidal waters. The court held, *inter alia*, that wetlands above the mean high water line are subject to Federal jurisdiction under Section 404 of the Federal Water Pollution Control Act, as amended (the "FWPCA") and that discharges of dredged material into such areas "constituted discharges entering 'waters of the United States'."

The result reached in *U.S. v. Holland* is a jurisdictional milestone under the FWPCA. Wetlands above, and below, the mean high water line are of vital importance to our environment. The Corps has taken an admirably firm position to protect wetlands below the mean high water line. Recently issued Corps regulations stated that: "As environmentally vital areas, [wetlands] constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest." 33 CFR Section 209.120(g)(3). Our concern is that similar protections be provided for wetlands above the mean high water line.

We believe that the *Holland* decision provides a necessary step for the preservation of our limited wetland resources. Moreover, we are firmly convinced that the court properly interpreted the jurisdiction granted under the FWPCA and Congressional power to take such a grant.

Notwithstanding the decision in *U.S. v. Holland* and the recognized importance of wetlands to the environment, we have been informed that the Corps has declined to acquiesces in the *Holland* decision and has advised Corps installations not to accept applications for permits under FWPCA Section 404 for dredge and fill disposal in these areas. The Department of Justice has taken the position that it will not bring enforcement action against persons disposing of dredged or fill material to wetland areas without Section 404 permits so long as the Corps refuses to issue such permits. As a consequence, wetland areas above the mean high water line are presently unprotected from the irreparable damage caused by the disposal of dredged and fill materials.

So that this important and irreplaceable part of the environment will not go unregulated, I strongly urge the Corps of Engineers to reconsider its position and to commence processing Section 404 permits for wetlands above the mean high water line immediately. I would appreciate the opportunity to discuss this matter with you at your earliest convenience.

A separate but related matter also requires attention. On April 3, 1974, the Corps of Engineers promulgated final regulations with respect to Corps permits for various activities in navigable or ocean waters. 39 Federal Register 12115. Among other things, these regulations set forth certain procedures for the issuance of permits for the disposal of dredged or fill material under Section 404 of the FWPCA.

Of particular concern to the Environmental Protection Agency is the definition of "navigable waters" set forth in these regulations, 33 CFR Section 209.120(d)(1). In proposed regulations published on May 10, 1973 (38 Federal Register 12217), the Corps proposed to define the term "navigable waters" to mean "waters of the United States, including the territorial sea," in accordance with the definition of "navigable waters" in the FWPCA. The final regulations promulgated on April 3, 1974, deleted the previous definition of "navigable waters" and substitutes therefor the following:

> "The term 'navigable waters of the United States' and 'navigable waters,' as used herein mean those waters of the United States which are subject to the ebb and flow of the tide, and/or are presently or have been in the past, or may be in the future susceptible for use for purposes of interstate or foreign commerce (See 33 CFR 209.260 for a more complete definition of these terms)."

The preamble to the final regulation discusses the Corps' reasons for changing the definition and makes it clear that the term "navigable waters of the United States" as used in the Rivers and Harbors Act of 1899 and the term "navigable waters" as defined in the FWPCA are to be "created synonymously." The preamble and the reference to the Corps' definitional regulation at 33 CFR 209.260 make it clear that the Corps intends to delineate FWPCA Section 404 jurisdiction on the basis of court decisions and Corps interpretations of "navigability." Our interpretation of "navigable waters" within the meaning of the FWPCA does not conform to the Corps' recently issued regulation. We firmly believe that the Conferences Committee deleted "navigable" from the FWPCA definition of "navigable waters" in order to free pollution control from jurisdictional restrictions based on "navigability." Indeed, as the Conference Report states with respect to the modified definition of "navigable waters": "The conferees fully intend that the term 'navigable waters' be given the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes." S. Rep. 92-1236, 92d Cong., 2d Sess. at 144. Perhaps a meeting of the appropriate personnel of the Corps and of EPA should be scheduled to resolve these discrepancies.

Sincerely yours,

/s/ John Quarles
Russell E. Train
Administrator

Lt. General W. C. Gribble, Jr.
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Statement of the
American Farm Bureau Federation

TO THE

HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

REGARDING: CLEAN WATER ACT

JULY 19, 2007

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600 Maryland Ave SW | Suite 1000W | Washington DC 20024 | p 202 406 3600 | f 202 406 3606 | www.fb.org

The American Farm Bureau Federation appreciates the opportunity to submit testimony on the federal regulatory reach of the Clean Water Act (CWA). The scope of federal jurisdiction is extremely important to farmers and ranchers because jurisdictional determinations directly impact agricultural activities, have the potential to interfere with the use of private land and, if applied too broadly, impede our ability to produce food, fiber and fuel. As currently drafted, H.R. 2421 will not only expand CWA jurisdiction but sweep many agricultural and forestry activities into the scope of CWA regulation simply because such activities are conducted near some ditch, swale, wash, erosion feature or ephemeral stream that would be deemed a "water of the United States." The legislation represents the most sweeping change to the law since its enactment in 1972.

As it stands today, the CWA is clearly one of the nation's most successful and comprehensive environmental laws. It regulates pollution at its source and involves a comprehensive federal and state regulatory system for issuance of permits and water quality standards.

One has only to read the history of the CWA to recognize that when it passed the CWA in 1972, Congress clearly intended to use the term "navigable waters." The conference report specifically states "Congress intends the term 'navigable waters' be given its broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes." But deleting "navigable waters" from the CWA changes—rather than clarifies—Congress' original intent. CWA section 101(b) states "[i]t is the policy of the Congress to recognize, preserve, and protect the *primary responsibilities and rights* of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter." CWA § 101(b). If all waters are subject to federal control, then few if any waters would be controlled by the State. We believe the term "navigable waters" anchors and preserves this balance with the States. Moreover, it does so without jeopardizing – as some claim – the nation's ability to protect our waters.

A by-product of being one of the nations' most effective laws, the CWA is also one the nations' most litigated. Concurrent with that litigation, EPA and the Corps of Engineers (Corps) have also used policies and guidance documents over the past 34 years to erode exemptions, expand jurisdiction and inject Federal regulation and oversight onto more and more private land. The result has been court decisions that have gone back and forth in expanding and reducing federal jurisdiction. Prior to *Solid Waste Agency of Northern Cook County* (*SWANCC)*, the agencies asserted jurisdiction based upon a waterbody's potential use by migratory birds or if an area met ever-changing delineation criteria that reached dryer and dryer land because these criteria are not in either statute or regulation. Accordingly, all wetlands and water everywhere that could be used by birds was once subject to federal jurisdiction. The Supreme Court stated that this "bird rule" went too far and had no relation to the CWA. Therefore, legislation that asserts jurisdiction to what was in existence prior to *SWANCC* does not 'restore' Federal authority: it would authorize such jurisdiction for the first time. Moreover, it would authorize federal control as broad or broader than the "bird rule."

We are concerned that legislation pending before this committee – H.R. 2421 – would have substantial negative ramifications on a very large part of our economy in ways that have not yet been fully considered or understood.

Section 3 (Findings) of the bill includes Congressional findings which are clearly intended to support an expansive view of Congressional power. For example, paragraph (5) states that protection of intrastate waters is "necessary to restore and maintain the chemical, physical, and biological integrity of all waters in the United States." Paragraph (7) essentially states that small and intermittent streams affect larger streams and rivers. Section 3 includes 17 such findings in all.

Section 4 (Definition of "Waters of the United States") deletes the word "navigable" from the Clean Water Act (CWA) and defines "waters of the United States" in very broad and ambiguous terms. By simply deleting the term "navigable waters" from the CWA and replacing it with "waters of the United States" this alteration to existing law would completely unhinge the CWA from the Commerce Clause of the Constitution. Moreover, and perhaps as importantly, as a new congressional pronouncement on Federal jurisdiction, it would have the effect of 'wiping the slate clean' and effectively would require a complete "do-over" of the code of Federal Regulation and 35 years of CWA judicial precedent.

In fact, however, the language in H.R. 2421 goes much farther than a simple redefinition; it does not limit the type of "waters" that would be regulated in any way whatsoever. The bill would apply the broadest possible interpretation of the CWA, subject only to Congress' Constitutional limits and remove any argument that Congress intended any limits at all on the regulatory reach of the Act. Truly navigable waterways, tributaries, streams with permanent flow, streams with seasonal flow and wetlands adjacent to such waterways are already subject to CWA regulation under current law. As a result, the bill's major impact would be where CWA jurisdiction may be questionable, such as where the hydrologic connection may be too insubstantial for any linkage to be established with navigable waters.

The legislation also regulates the waters identified in the definition "to the fullest extent that these waters, *or activities affecting these waters*, are subject to the legislative power of Congress under the Constitution." This is a breathtaking expansion of the Clean Water Act and is virtually unprecedented in that statute. The language on "activities affecting these waters" does not exist in the current regulations, is extremely ambiguous and it is tantamount to an open invitation to any activist to use the law's citizen suit provisions to go to court to stop anything he or she doesn't like. That language will likely be read broadly in the courts to allow the regulation of all activities that "affect" waters. In other words, regardless of whether an activity is occurring in or near a water, the fact that the activity may impact a water would allow the activity to be regulated under the CWA.

This is a significant expansion of the existing CWA and its regulations. Federal courts have broadly interpreted the types of sources and activities that are deemed to involve "point source" discharges of "pollutant" or "dredged or fill material." Today, virtually any activity that involves the release or application of any substance could be deemed a "discharge of a pollutant" or a source of "stormwater discharge," if the substance is used directly in a "water of the United States" or gets washed by rainwater into a "water of the United States." The language being proposed in H.R. 2421 could reach a backyard mosquito fogger if a breeze happens to blow it into "waters of the United States." As it stands, just about any activity that involves the movement of earth (for example, clearing a quarter acre of land for a homesite, barn, or pasture) would probably be considered a discharge of "dredged or fill material" subject to section 404 "wetlands" permitting, if it involves any "water of the United States." Given the extreme breadth in the types of activities that are deemed to involve Clean Water Act "discharges" if they somehow touch "waters of the United States," it seems unavoidable that expanding the geographic scope of "waters of the United States" will result in a dramatic expansion of the activities covered by the Act.

The Act authorizes EPA to regulate point source *discharges* to waters of the United States – not "activities" and not even point sources themselves. (*See Waterkeeper Alliance, Inc. v. EPA*, 399 F.3d 486, 504-05 (2d Cir. 2005)). Thus, EPA lacks authority under the Act to regulate pesticide use, fire suppression, livestock production or any other source or activity – it can only regulate an actual point source pollutant *discharge* that occurs in connection with such activities. This is a bedrock principle that will be muddied by careless references to the regulation of "activities." We encourage Congress to avoid inadvertently altering the fundamental focus of the Clean Water Act on *discharges*.

Section 5 (Conforming Amendments) simply ensures the term "navigable waters" will be deleted wherever found within the current CWA.

Section 6 (Saving Clause) paraphrases by reference a few existing CWA exemptions but the impact of the section is actually far-reaching – not for what it does but for what it doesn't do. If it is designed to protect the exemptions which it references, it does not do so for a simple reason: the only thing which is "saved" by this section of the bill is the authority of the administrator. The "savings clause" does not state that the enumerated exemptions, or any other exemption in existing law or regulation, "shall" be exempted from federal jurisdiction under the CWA. The exemptions themselves are left wholly unprotected. Thus, should the legislation be enacted, when new regulations are promulgated those exemptions are not only vulnerable to repeal, the broad, sweeping mandate referenced in earlier sections of the legislation are an open invitation to the agencies to sweep away long-standing exemptions as well.

At a bare minimum, the way the section is drafted unnecessarily raises questions regarding congressional intent with respect to the full scope of existing statutory exemptions. It is troubling that it includes "agricultural return flows" but not "agricultural stormwater discharges." Given the limited scope of these exemptions, however, farmers and ranchers are worried that the legislation will sweep many farming activities into the scope of CWA regulation. Specifically, the clause does not exempt any waters or areas from the broad definition of "water of the United States." It exempts only certain activities from being considered "discharges." For example, maintenance of a ditch would not be considered a "discharge," but the ditch would be jurisdictional water – and all other activities that affect the ditch would be regulated. The savings clause also fails to adopt the important regulatory exclusions for prior converted cropland and waste treatment systems and likely limits the agencies' ability to adopt these or other common sense regulatory exemptions.

Second, the §404(f)(a)(A) exemption from dredge and fill permitting requirements for "normal farming, silviculture, and ranching activities" has already been significantly narrowed by the agencies to apply only to *established, ongoing operations*. (For example, if a farmer has been plowing and planting crops in a field containing jurisdictional "wetland" areas, he can continue to do so without the need for a §404 permit, provided that his activities do not convert the wetlands to dry land. However, expanding or establishing a new agricultural or forestry operation in an area not previously used for that purpose would *not* be exempt from regulation.) For this reason, expanding the scope of "waters of the United States" to cover even small, isolated wetland areas effectively places all such areas off limits – even for farming and forestry – unless the area is already part of an established, ongoing operation.

Third, not all agricultural and forestry activities enjoy the benefit of an explicit statutory exemption. Pesticide use, for example, which may involve the deposit or drift of pesticide into areas deemed "waters of the United States," is covered by no explicit statutory exemption. Similarly, the application of fertilizer, fire suppression activities, and other farming or forestry activities that may incidentally add material to "waters of the United States" are not expressly exempted by statute. Thus, there are potentially a tremendous number of agricultural and forestry-related sources and activities could be swept into Clean Water Act regulation by the expansion of the scope of "waters of the United States" that is now under consideration.

Fourth, the bill and savings clause also fail to adopt the important regulatory exclusions for prior converted cropland and waste treatment systems and likely limits the agencies' ability to adopt these or other common sense regulatory exemptions.

In conclusion, farmers and ranchers understand the role that the CWA has played in improving and maintaining the health and safety of the nations' water resources. Agricultural producers are very sensitive to the environment because they own and manage two-thirds of the nation's land. They are doing their part to promote the principles of environmental stewardship by being good stewards of the nation's soil, air and water resources. But the cost of this stewardship is not cheap. Meeting the demand for food, feed and fuel as well as society's demands for improved environment quality requires farmers and ranchers to balance, and often individually bear the cost of achieving many competing goals and objectives. Agriculture's impacts on the environment are closely intertwined with countless human activities that are yielding a higher quality of life all Americans. Our ability to increase agricultural productivity – with the use of modern crop production tools like fertilizers – has enabled our nation's farmers and ranchers to increase the production of food, feed and fuel without increasing the acreage of cropland. Our productive capacity is unprecedented in the world's history and allows our farmers and ranchers to meet the demands of our nation's growing population as well as growing world populations and markets abroad. On top of this unprecedented productivity, there is little doubt that farmers and ranchers have made great strides in improving our environment over the last three decades. By nearly every measure, our environment and natural resources are in better condition than any other time in our lives.

In summary – H.R. 2421 applies the broadest possible interpretation of the CWA, subject only to constitutional limits and removes any argument that Congress intended any limit on the regulatory reach of the act. For this reason we oppose H.R. 2421 and urge that it not be approved by the Committee.

We appreciate your interest in this issue and the opportunity to submit this testimony.

American Road &
Transportation Builders
Association

Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

Statement of the American Road and Transportation Builders Association

Submitted to the United States House of Representatives Transportation and Infrastructure Committee

July 19, 2007

On behalf of the American Road and Transportation Builders Association (ARTBA) and its 5,000 member firms and public agencies nationwide, the association would like to thank Chairman Oberstar and Ranking Member Mica for reviewing the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act (CWA).

ARTBA's membership includes public agencies and private firms and organizations that own, plan, design, supply and construct transportation projects throughout the country. ARTBA members are directly involved with the federal wetlands permitting program and undertake a variety of construction-related activities, under the CWA. As part of the highway construction process, ARTBA members are actively involved in the restoration and preservation of wetlands. ARTBA has consistently supported the concept of mitigation banking, which is particularly beneficial to the transportation project delivery process, as it provides project planners flexibility in meeting wetlands restoration obligations by allowing the choice of a mitigation site based on environmental value rather than proximity to a highway project. Mitigation banking also enables project sponsors to chose areas for mitigation that are well suited for wildlife and wetlands management (such as the enhancement of already degraded wetlands).

ARTBA has a long history of working with the Transportation and Infrastructure Committee to find common-sense solutions to environmental issues by seeking to protect natural resources and efficiently deliver of transportation improvements. The transportation construction industry and state departments of transportation have been grappling with wetlands issues for years and often face confusing and conflicting interpretations on the scope of federal jurisdiction. Not knowing what is or is not a federally jurisdictional wetland complicates long-term transportation planning and because planners can never be sure where permits will or will be not required.

ARTBA supports the reasonable protection of environmentally sensitive wetlands with policies balancing preservation, economic realities, and public mobility requirements. Much of the current debate over federal jurisdiction, however, involves overly broad and ambiguous definitions of "wetlands." This ambiguity is frequently used by anti-growth groups to stop desperately needed transportation improvements. For this reason, ARTBA has, and continues to, work towards a definition of "wetlands" that would be easily recognizable to both landowners and transportation planners. As an example of this, official ARTBA policy recommends defining a "wetland" as follows: "If a land area is saturated with water at the surface during the normal growing season, has hydric soil and supports aquatic-type vegetation, it is a functioning wetland."

ARTBA has been actively involved in the discussions about federal jurisdiction over the nation's waters and wetlands for the better part of the past two decades. ARTBA was a main participant in litigation spanning 14 years concerning the United States Army Corps of Engineers (Corps) "Tulloch Rule" regulating incidental fall back from dredging and filling operations. Also, ARTBA was involved in multi-year litigation over modifications to the Corps' Nationwide Permit (NWP) program. Most important to this hearing, however, is that ARTBA filed amicus briefs representing the transportation construction industry's interests in the United States Supreme Court decisions of *Solid Waste Association of Northern Cook County v. United States Army Corps of Engineers* (*SWANCC*) and *Rapanos v. United States* (*Rapanos*).

The decisions in both *SWANCC* and *Rapanos* benefited the transportation project delivery process by setting limits on Corps' jurisdiction. Specifically, *SWANCC* struck down the so-called "migratory bird rule," which was being used by the Corps to assert jurisdiction over intrastate wetlands based on the flight patterns of migratory birds. The theory behind such an expansion of Corps authority was based on migratory birds being instruments of commerce due to the possibility of hunters, bird-watchers or other interested state parties crossing state lines to view them. The "migratory bird rule" was a severe hindrance to transportation planners as it made federal jurisdiction extremely hard to predict. Project developers, not knowing the habits of migratory birds, were unable to tell what was and was not a jurisdictional wetland.

At issue in *Rapanos* were two separate wetlands cases which were consolidated for the Court's review. The cases asked the Court to decide whether the Clean Water Act allows Corps regulation of "isolated wetlands" that have no connection with "navigable waters." The Court was also asked to decide whether or not a tenuous connection between a wetland and "navigable water" is enough to allow regulation by the Corps, or if there is a minimal standard that should be applied. The Court's split decision in *Rapanos* prevents sweeping federal authority over isolated wetlands and man-made ditches or remote wetlands with finite connections to navigable waters. However, because the Court's decision was not issued by a majority of the justices, these issues are currently being examined by lower courts on a case-by-case basis. While ARTBA applauds the fact the decision prevented an expansion of already burdensome federal wetlands regulation, we also recognize the need for clarity in *Rapanos'* wake.

In decisions such as *Rapanos* where four justices agree in both the plurality opinion (authored by Justice Scalia) and the dissenting opinion (authored by Justice Stevens) and one Justice (Justice Kennedy) writes a concurrence, the effects of the opinion should be taken from the areas where the plurality and the concurrence agree. The Supreme Court has spoken to this point specifically, stating:

> "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, 'the holding of the Court may be viewed as that position taken by the members who concurred in the judgments on the narrowest grounds.'"[1]

In *Rapanos*, the five justices who agreed in the final judgment of the case were Justices Scalia, Thomas, Alito, Roberts and Kennedy. Thus, in responding to the *Rapanos* decision, the focus should be on those areas where agreement can be found among these five justices.

The Scalia plurality and the Kennedy concurrence agree on several points which should guide any regulatory or legislative response to the *Rapanos* decision. Most importantly, both Scalia and Kennedy disagreed with the existing Corps theory of jurisdiction that a wetland with tenuous and questionable connections to navigable water can be subject to federal jurisdiction if one molecule of water flows between both points. This has been termed by some as the "migratory molecule" theory of jurisdiction. Justice Kennedy specifically rejects the idea of the "migratory molecule" by noting that a "central requirement" of the Clean Water Act is "the requirement that the word 'navigable' in 'navigable waters' be given some importance."[2]

Justice Kennedy also explains certain basic recognizable limits to the Corps' excluding man-made ditches and drains by refuting portions of Justice Stevens' dissent:

> "[t]he dissent would permit federal regulation whenever wetlands lie alongside a ditch or a drain, however remote and insubstantial, that eventually flow into traditional navigable waters. The deference owed to the Corps' interpretation of the statute does not extend so far."[3]

Further, Justice Kennedy notes such an over-expansive view of the Corps' authority is incompatible with the Clean Water Act:

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[1] *Marks v. United States*, 430 U.S. 188, 193 (1977).

[2] *Rapanos v. United States*, 126 S.Ct. 2247 (2006) (Kennedy, J. concurring).

[3] *Id.*

> "Yet the breadth of this standard—which seems to leave wide room for regulation of drains, ditches, and streams remote from any navigable-in-fact-water and carrying only minor water-volumes towards it—precludes its adoption as the determinative measure of whether adjacent wetlands are likely to play an important role in the integrity of an aquatic system comprising navigable waters as traditionally understood. Indeed, in many cases wetlands adjacent to tributaries covered by this standard might appear little more related to navigable-in-fact waters that the isolated ponds held to fall beyond the Act's scope in SWANCC."[4]

This leads to a central point of *Rapanos* echoed by members of the plurality, dissent and Justice Kennedy—there needs to be some sort of regulatory response from the Corps reflecting these limits on its jurisdiction. In his concurrence, Justice Kennedy states:

> "Absent more specific regulations, however, the Corps must establish a specific nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to navigable tributaries. Given the potential overbreadth of the Corps regulations, this showing is necessary to avoid unreasonable applications of the statute."[5]

Chief Justice Roberts was more direct with his wording, noting a regulatory response from the Corps has been long overdue, and should have been promulgated after the *SWANCC* decision first recognized the jurisdiction of the Corps needed to be limited:

> "Rather than refining its view of its authority in light of [the Court's] decision in *SWANCC*, and providing guidance meriting deference under [the Court's] generous standards, the Corps chose to adhere to its essentially boundless view of the scope of its power. The upshot today is another defeat for the agency."[6]

Finally, Justice Breyer's dissent warns a refusal from the Corps to issue a regulatory response to *Rapanos* will only result in more litigation:

> "If one thing is clear, it is that Congress intended the Army Corps of Engineers to make the complex technical judgments that lie at the heart of the present cases (subject to deferential judicial review). In the absence of updated regulations, courts will have to make ad hoc determinations

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[4] *Id.* at 2249, referring to the holding in SWANCC

[5] *Id* at 2250.

[6] *Id.* at 2236 (Roberts, C.J., concurring).

> that run the risk of transforming scientific questions into matters of law. This is not the system Congress intended. Hence, I believe that today's opinions, taken together, call for the Army Corps of Engineers to write new regulations, and speedily so."[7]

Thus, the one thing that is clear from the *Rapanos* decision is the need for a response recognizing the limits of Corps jurisdiction and clarifying the existing wetlands regulations. The response can be either administrative or legislative in nature. In crafting either type of response, ARTBA recommends the result be a clarified, consistent regulatory program that operates within the proper jurisdictional limits of the Clean Water Act as reflected in the *Rapanos* and *SWANCC* decisions.

The United States Environmental Protection Agency (EPA) and the Corps released guidance June 5 in response to the *Rapanos* decision. The guidance went into effect immediately after its release, allowing the Corps to immediately begin working on permit applications. However, the Corps also is allowing a six-month comment period in order for the regulated community to provide examples of how well the guidance is (or isn't) working in the field. ARTBA is currently reviewing this guidance and developing regulatory comments prior to the Corps deadline of December 5. While ARTBA has not issued any statements evaluating the Corps' guidance, we are supportive of the regulatory process and value the chance to be able to add our input prior to the issuance of any final regulation.

There have also been legislative responses attempting to solve the confusing issue of Corps jurisdiction. While ARTBA appreciates the desire of Congress to protect legitimately environmentally sensitive wetlands, we believe such efforts should not extend federal regulation to isolated areas that have no environmental value and have been removed from the Corps' jurisdiction by both *Rapanos* and *SWANCC*. Protecting an area simply for the sake of protection adds little from the standpoint of environmental quality, but can create needless, time-consuming regulatory complications.

ARTBA has supported legislation in the past including, H.R. 2658, the Federal Wetlands Jurisdiction Act, sponsored by Reps. Richard Baker (R-La.) and Marion Berry (D-Ark.) in the 109th Congress. This measure would have clarified wetlands regulations by retaining federal jurisdiction over traditional navigable waters and tributaries connected to such waters through a contiguous, naturally occurring surface water connection and the wetlands adjacent to such waters. It would have also excluded the isolated wetlands the Court removed from Corps jurisdiction in *SWANCC* as well as man made ditches and wetlands connected to navigable waters by pipes, culverts, ditches and ephemeral areas.

Also, ARTBA has repeatedly stated the involvement of multiple agencies (including EPA) in wetlands regulation only hinders the overall efforts of the Corps' permitting program. One of the principal problems that has plagued the 404 program is indecision and inaction, with no benefit for the environment. Justice Breyer reiterated this in his aforementioned *Rapanos* dissent, stating "If one thing is clear, it is that Congress intended the Army Corps of Engineers to make the complex technical judgments that lie at the heart of [federal wetlands jurisdiction]."[8] Congress reiterated this point in the National Defense Authorization Act for Fiscal Year 2004 by authorizing only one agency, the Corps, to issue 404 permitting program regulations. This direction should be continued. Thus, it should be the sole responsibility of the Corps to take the lead and build a stronger, more predictable compensatory mitigation program to both enhance environmental protection and provide a measure of certainty to regulatory staff and permit applicants. ARTBA continues to believe the Corps should be the principal agency administering the 404 wetlands regulatory program.

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[7] *Id.* at 2266 (Breyer, J., dissenting).

Currently, the Committee is considering H.R. 2421, the "Clean Water Authority Restoration Act of 2007" (CWARA). While ARTBA appreciates the desire on the part of the drafters of this legislation to provide greater certainty to the regulated community, we are concerned about possible unintended consequences to the transportation improvement delivery process resulting from its implementation. CWARA, as written, would remove the term "navigable" from the CWA and allow the Corps to regulate all "waters of the United States." This would include interstate waters as well as intrastate waters, which were specifically removed from Corps jurisdiction in the SWANCC decision. ARTBA's fundamental concern with this legislation is that instead of greater clarity, it could lead to greater federal regulatory power and increased litigation. The extension of federal jurisdiction proposed under CWARA would directly affect many (if not all) of the transportation improvements communities are relying on to address pressing public health and safety needs as well as reduce congestion. By broadening the reach of the Corps, such desperately needed transportation construction projects could be delayed by increased permitting requirements, even if they had no link to rivers, streams or other "navigable" water bodies.

Specifically, the language of CWARA would cover all roadside ditches along any new or existing roadway. Elevating roadside ditches and other isolated waters to the same protective status as ecologically sensitive wetlands could create inefficiencies in state efforts to protect areas of true environmental importance. CWARA could require permits for areas which regulators had, after informed decision-making processes, previously designated as non-environmentally sensitive. This expansion of federal authority has great potential to impact both new transportation projects and improvements to existing roadways.

Many ARTBA members are directly involved in tremendously successful mitigation efforts as part of the projects they construct. ARTBA public official members also are integrally involved in the permitting process itself, as they regulate at the state and local level. Expansion of federal jurisdiction leading to increased permit loads for both the regulators (to process) and the regulated community (to apply for) could cause a sizable drain on both federal and state transportation agency resources. A prime reason for the success of current mitigation efforts is the flexibility of individual states to delegate which wetlands to protect and direct mitigation efforts appropriately. Removing this flexibility and possibly mandate protection of all wet areas, no matter how environmentally important, could dilute both state and federal resources. Retaining state autonomy over wetland protection efforts is essential to maximize the efficiency of these programs and public sector resources.

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[8] *Id.*

CWARA could also lead to an increase in litigation designed solely to delay or stop transportation construction projects. ARTBA has been pleased to be able to work with the committee in the past to address the issue of excessive litigation, particularly in the "Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users" (SAFETEA-LU). Broadening the reach of the Corps' regulatory power would force the Corps to make more decisions about whether or not to exert its regulatory authority by expanding the number of areas under its jurisdiction. Regardless of what action the Corps decides to take, these decisions could then be appealed in the courts. Thus, even if the Corps chooses not to regulate, opponents of transportation projects could sue in order to have that decision overturned. Regardless of the legal merits of such a challenge, communities pursuing transportation improvements are hurt simply by the filing of a lawsuit and the threat that a project will be delayed by litigation. Often times the publicity and uncertainty that accompanies the filing of a lawsuit is enough to delay, or even cancel, a transportation project.

ARTBA looks forward to continuing its long tradition of working with the committee in order to find a solution to this issue which balances needed environmental protections with the efficient delivery of all modes transportation projects vital to the nation's public health and safety.

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Testimony of
The American Society of Civil Engineers
Before The Transportation and Infrastructure Committee
U.S. House of Representatives
on the
Status of the Nation's Waters, Including Wetlands, Under the Jurisdiction of The Federal Water Pollution Control Act

July 19, 2007

Mr. Chairman and Members of the Committee:

The American Society of Civil Engineers (ASCE) is pleased to offer this testimony on the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act, commonly known as the Clean Water Act.

ASCE believes that Congress must amend the Act to clarify federal jurisdiction over wetlands, establish clearly where states must assume responsibility, and provide appropriate federal oversight. We recommend legislation that would:

- Maintain federal jurisdiction over all interstate and navigable waters, their tributaries, and all adjacent wetlands under the pre-2001 U. S. Army Corps of Engineers' regulatory program under the Commerce Clause in the U.S. Constitution using an unambiguous test for *significant nexus* to navigable-in-fact waters.
- Clarify state jurisdiction under section 404 of the Clean Water Act over isolated, non-navigable intrastate waters and their adjacent wetlands, including vernal pools, playas, and prairie potholes, considering recent Supreme Court decisions and other jurisdiction based on environmental and wildlife considerations under regulations promulgated by the Department of the Interior or the Environmental Protection Agency.
- Amend the Clean Water Act to clarify purely environmental federal jurisdiction over intermittent and ephemeral streams and their adjacent wetlands under section 404 of the U.S. Army Corps of Engineers, in coordination with the Environmental Protection Agency.

We believe that **H.R. 2421, the Clean Water Restoration Act of 2007**, satisfies most of these important policy goals. Significantly, the bill would remove the phrase "navigable waters" from the Act. This phrase is an artifact from an era in which the federal government was expected to protect navigation rather than environmental systems; the term is not necessary to protect waters of the United States from pollution. Indeed, the phrase already has resulted in a narrowing of the scope of the Act. H.R. 2421 also would define more exactly the types of waters and wetlands that are subject to federal protection under section 404. This definition would remove the ambiguity surrounding the present judicial and administrative interpretations over the precise sphere of the Act.

We believe the bill could be improved, however. We suggest certain changes that would ensure that the Clean Water Act would protect wetlands and other waters of the United States to the maximum extent practicable.

The bill should be modified to:

- Provide incentives for the states to strengthen their programs to protect all wetlands under the Clean Water Act. The goal should be to increase delegation of the section 404 program to authorized states beyond the two states currently authorized to issue permits in lieu of the Corps of Engineers. One incentive could be realized by authorizing the use of grant money under section 106 for state wetland protection programs that meet minimum federal standards.

The states need to increase their efforts to preserve vital wetlands within their borders under section 404. Only Michigan and New Jersey now operate federally delegated wetlands programs. The remaining states need assistance to become full partners with the federal government in preserving wetlands, including geographically isolated wetlands.

- Emphasize the scientific basis for extending federal jurisdiction over waters of the United States.

Site hydrology is the critical factor in the preservation of wetlands. "Hydrological conditions, including variability in water levels and water flow rates, are the primary driving force influencing wetland development, structure, functioning and persistence."[1] Most hydrologic processes exhibit a high degree of temporal and spatial variability and are further beset by issues of nonlinearity of physical processes, conflicting spatial and temporal scales, and uncertainty in limit estimates. Wetlands analysis involves the application of many scientific disciplines, including remote sensing, atmospheric science, abiotic and biotic disciplines (ecology and plant physiology), modeling within watersheds, hydrometeorology, surface and groundwater models, surface and groundwater interaction, and other technical fields. The findings should explain that jurisdiction is based on these factors.

- Delete from the definition of waters of the United States in section 4 the phrase "to the fullest extent that these waters, or activities affecting these waters, are subject to the legislative power of Congress under the Constitution."

This phrase is superfluous. Congress has plenary power to legislate under the Constitution, and there are few (though important) restrictions on that power. "The only limitation upon Congress is that[,] in enacting laws pursuant to its constitutional power[,] it shall not be unreasonable, arbitrary or capricious and that the means selected shall have a real and substantial relation to the object sought to be attained."[2] Moreover, the phrase could result in litigation the results of which might create unforeseen difficulties for congressional legislative authority generally through a judicially decreed limit on the reach of the Congress's power.

I. Background

In recent years, the U.S. Supreme Court has sought to substantially restrain congressional power to regulate intrastate commerce—that commerce covering a broad class of economic activities occurring wholly within one state—under the Commerce Clause to the Constitution.

Part of this trend has led the Court to limit the power of Congress over "waters of the United States" under the Clean Water Act (CWA) based on presumed conflicts between federal regulations over waters of the U.S. and the extent of the Act's power under the Commerce Clause. This development has had unfortunate consequences for geographically isolated wetlands, a unique form of ecosystem hydrology. The Court has attempted to draw a bright-line legal rule in order to establish the water's edge. The attempt ignores the science of wetlands. The effort also is compromised by the congressional belief in 1972, since proved mistaken, that states would agree to play a major role in the protection of isolated wetlands—a belief that has not been borne out by developments in a majority of the states. Congress must act to restore the balance in favor of the broad protections for America's aquatic resources first envisioned thirty-five years ago.

A. Wetlands

"Wetlands" are a transitional area between solid ground and water; the water table is usually at or near the surface. Frequently the land itself is covered by shallow water. To be classified as wetlands, the site must meet at least one of the following criteria: (1) the land periodically must support the growth of plants that grow either partly or totally under water; (2) the substrate must be composed predominantly of undrained wet soil; and (3) the substrate is saturated with water or covered by shallow water at some time during the growing season of each year.[3]

Wetlands perform a number of critical ecological and economic functions. They recharge groundwater, store floodwaters, reduce storm surges from hurricanes, retain sediment, improve water quality through the removal of toxic chemicals and nutrients, provide a general habitat for many animal species, and provide economically important recreational activities for people. Their loss decreases the overall capacity of the aquatic environment to carry out its various functions.[4]

There were an estimated 107.7 million acres of wetlands in the United States in 2004.[5] Although the United States has steadily lost wetlands since the first European settlers arrived, overall losses on a massive scale may no longer be occurring. The Fish and Wildlife Service found in 2004 that, for the first time since statistics began being kept, the nation experienced a net gain of 191,750 acres of wetlands—all of them man-made—between 1998 and 2004.[6] "It is likely there was no longer an overall net loss of wetland acreage occurring within the contiguous United States between 1997 and 2002. The statistical uncertainties, however, make it inappropriate to interpret these results as an overall net gain."[7] Significantly, the federal studies provide no assessment of the quality of the restored wetlands. It remains unclear whether these artificial gains in wetlands acreage improve the overall ability of U.S. wetlands to carry out their important ecological and economic functions.

In more than 80 percent of the cases, isolated wetlands are completely surrounded by uplands and show no apparent surface water inlets or outlets.[8] The most commonly occurring isolated wetlands are those that are separated geographically.[9] In the past, federal officials have identified isolated wetlands as deserving special attention due to their ecological and economic values. "While all wetlands are important in ecological functioning on a watershed scale, some are better protected than others; isolated wetlands and waters are particularly at risk . . . ."[10] "Small isolated wetlands can be of great cumulative importance to the aquatic ecosystem."[11]

Isolated wetlands are found in every state and make up a significant portion of all U.S. wetlands.

> Of the 276 wetland and riparian ecological systems described for the United States, 81 (29 percent) met [the] working definition for

> "geographically isolated," based on documented knowledge of their distribution and typical site characteristics. Of the 81 isolated wetland types, only 16 (20 percent) fall into the strict isolation subcategory, while the remaining 65 systems (80 percent) fall into the partial isolation subcategory. [I]solated wetlands make up 13 percent of the 636 "natural/near natural" terrestrial ecological system types (both upland and wetland) currently classified . . . . for the United States.[12]

Numbers of isolated wetland types by state range from a low of one (West Virginia) to a high of 16 (New York and Texas). Proportions of wetlands categorized as isolated vs. non-isolated were lowest in Alaska, Hawaii, Kentucky, Tennessee, and West Virginia. In Indiana, Iowa, Kansas, Michigan, Minnesota, North Dakota, and Wisconsin, more than half of the wetland system types may fairly be classified as geographically isolated.[13]

A total of 33 endangered, threatened, or candidate animal species listed under the Endangered Species Act are wholly or partly dependent upon isolated wetlands for their habitats.[14] In addition, a total of 279 at-risk plant species are found in isolated wetlands nationwide.[15]

B. The Clean Water Act

Congress enacted the Federal Water Pollution Control Act Amendments of 1972 (now known to as the Clean Water Act) "to restore and maintain the chemical, physical, and biological integrity of the [n]ation's waters."[16] One of the mechanisms adopted by Congress in 1972 to achieve that purpose was to prohibit under section 404 the discharge of any pollutants into "navigable waters" without a permit issued by the United States or an authorized state.[17] The CWA provides that "[t]he term 'navigable waters' means the waters of the United States, including the territorial seas."[18]

Wetlands are one component of "waters of the United States." Determining the regulatory significance of "navigable waters" within the meaning of "waters of the United States" and the scope of the federal government's legal power to protect wetlands has occupied federal policymakers and the courts for more than two decades.

Section 404 of the Clean Water Act of 1972 limits the addition of pollutants and other materials into the waters of the United States.[19] Section 404 limits the destruction of the environment from industrial activity through a system of discharge permits issued by the U.S. Army Corps of Engineers. Not every discharge into waters of the U.S. requires a permit, however.[20]

In 1974, the Corps issued a rule that restricted the scope of section 404 to waters of the United States that are actually capable of carrying commercial traffic from one state to another. The rule sought to limit the scope of the 404 regulatory program only to those navigable waters regulated under section 10 of the Rivers and Harbors Act of 1899.[21] The 1974 rule was invalidated by the U.S. District Court for the District of Columbia, which held that the Clean Water Act jurisdiction extended to waters that do not meet "the traditional tests of navigability."[22]

In 1975, the Corps redefined "the waters of the United States" to include not only actually navigable waters but also their tributaries, interstate waters and their tributaries, and nonnavigable intrastate waters (i.e., waters wholly within one state) whose use or misuse could affect interstate commerce.[23] The new definition covered (1) all waters currently or formerly used or susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide; (2) all interstate waters, including interstate wetlands; (3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, if their use, degradation or destruction could affect interstate or foreign commerce, including any such waters (i) which are or could be used by interstate travelers for recreational or other purposes; or (ii) from which fish or shellfish are or could be taken and sold in interstate commerce; or (iii) which are used or could be used for industrial purpose by industries in interstate commerce; (4) all impoundments of waters otherwise defined as waters of the United States; (5) tributaries of regulated waters; (6) the territorial seas; and (7) wetlands adjacent to waters (other than waters that are themselves wetlands). The term excluded prior converted cropland.[24]

Congress expanded the scope of section 404 in 1977 to require a permit for discharges of dredged or fill material into navigable waters, including wetlands.[25] Discharges may be authorized by the Corps through an individual permit issued under section 404(a) or a general permit authorized by section 404(e).

C. Scope of the Commerce Clause

For 125 years, the Supreme Court accepted broad congressional power under the Commerce Clause over interstate commerce, including commerce on navigable waterways engaged in intrastate commerce.[26] The Commerce Clause applied to commercial activities crossing state lines as well as "to those activities intrastate which so affect interstate commerce or the exercise of the power of Congress over it as to make regulation of them appropriate means to the attainment of a legitimate end, the exercise of the granted power of Congress to regulate interstate commerce."[27] But in 1995 the Court began limiting congressional sway over what a bare majority of justices saw as purely local, intrastate commerce.[28]

With respect to the Clean Water Act, the new Commerce Clause direction had an immediate impact on federal regulation of U.S. waters. The Court had first attempted to define federal jurisdiction under the Act in United States v. Riverside Bayview Homes,[29] when it held that the U.S. Army Corps of Engineers (Corps) had broad power to regulate wetlands adjacent to navigable bodies of water and their tributaries under section 404. These wetlands, the Court concluded, could reasonably be regulated if the Corps found that they were "inseparably bound up" with "waters of the United States" that were subject to the Clean Water Act.[30] The Court also discarded a prerequisite that the regulated lands be under water.[31]

In January 2001, however, the opinion in Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers[32] retreated from the broad ruling in Riverside Bayview Homes and restricted federal jurisdiction over intrastate waters for the first time. To come within federal protection, the SWANCC Court said, the wetlands need to exhibit a "significant nexus" to navigable waters, a conclusion, the majority argued, that was in fact based on a principle in Riverside Bayview Homes.[33] The decision eliminated federal jurisdiction over isolated wetlands that were (or could be) used by migratory birds. The SWANCC Court indicated that the states could fill the gap left by the shortened federal leash over intrastate waters.

Notwithstanding the holding's narrow application to migratory bird habitats, the opinion seemed to indicate that all waters within a single state eventually could be beyond the reach of the Clean Water Act absent a clear connection to interstate commerce. Even though the SWANCC holding was limited only to certain isolated waters, its practical effect was to leave remote wetlands at risk of destruction from industrial activities due to the uncertainty in the minds of federal and state regulators over the reach of the 404 program. "The concepts of 'tributary,' 'adjacency,' and 'significant nexus' are the main jurisdictional issues in the post-SWANCC debate."[34] The decision was seen by many as a major revision to the Act. "In ruling that the Corps and the [Environmental Protection Agency] no longer had jurisdiction over isolated intrastate waters, the Court fundamentally changed section 404 wetlands regulatory programs."[35]

D. The Rapanos Decision

In 2006, a badly divided Court further reduced federal controls on development activities in wetlands located wholly within one state. In a plurality opinion, four justices questioned the Corps regulation of intrastate wetlands and concluded in Rapanos v. United States that the Act protects only "relatively permanent, standing[,] or flowing bodies of water."[36] From this premise, Justice Scalia reasoned for the plurality that only those wetlands with a continuous surface connection to "waters of the United States" are themselves subject to Clean Water Act jurisdiction. The plurality opinion clearly stated that wetlands "with only an intermittent, physically remote hydrologic connection to 'waters of the United States' do not implicate the boundary-drawing problem of Riverside Bayview, and thus lack the necessary connection to covered waters that we described as a 'significant nexus' in SWANCC."[37] Justice Kennedy, concurring in the judgment, argued that federal jurisdiction extends to those waters where "a significant nexus" to interstate waters based on the Act's goals and purposes of restoring and maintaining maintain the chemical, physical, and biological integrity of the nation's waters. Rejecting the plurality's conclusion that federal jurisdiction requires a direct hydrologic connection, he argued that "the Corps' conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone."[38]

Importantly, all nine justices agreed that the term "waters of the United States" includes some waters that are not navigable in the traditional sense.[39] But the plurality concluded that "SWANCC rejected the notion that the ecological considerations upon which the Corps relied in Riverside Bayview . . . provided an independent basis for including entities like 'wetlands' (or 'ephemeral streams') within the phrase 'waters of the United States.'"[40]

E. Role of the States

The states have been slow to accept the Court's summons to action in the six years since the decision in SWANCC. As we have noted, only two states have received federal approval to issue section 404 dredge-and-fill permits. By early 2007, meanwhile, only 15 states addressed isolated wetlands in their administrative codes. Still more significantly, few of these states offer the same level of protection to remote wetlands as the federal program did.

Under state laws, general protections for wetlands vary enormously from state to state, and not all state wetlands laws affirmatively shield wetlands as wetlands from destruction. In Alabama, for example, a 1965 statute states that: "It is hereby declared that the drainage of surface water and the reclamation of wetlands, swamplands, overflowed lands and tidal marshes and flood prevention and the conservation, development, utilization and disposal of water shall be considered a public benefit and conducive to the public health, safety, convenience, utility and welfare."[41]

Wisconsin law, on the other hand, recognizes broad protections for all wetlands and emphasizes the importance of the hydrological connection among wetlands and watersheds. "A particular wetland may function to maintain the hydrologic characteristics, and thereby the physical and chemical integrity of an entire aquatic ecosystem. Assessment of the hydrologic support function shall consider the effects that modifications of a particular area could have on the hydrologic relations to the whole wetland or aquatic ecosystem, and on the cumulative effects of piecemeal alterations."[42]

The state of Tennessee has adopted the hydrogeomorphic system approach to "identify and group functionally similar wetlands."[43]

II. Need for Congressional Action

The decisions in SWANCC and Rapanos cause two problems for those states inclined to venture deeply into isolated wetlands in future. These failings must be addressed by Congress, not the states, in order to ensure a consistent level of protection for the nation's wetlands.

- Taken together, the Court's reading of the Clean Water Act in the two opinions attempts to apply the legal principles of statutory construction, not scientific ones. Whether the decisions follow the canons of statutory construction is debatable, but they clearly fail to take subsurface hydrology and the intrinsically interstate nature of U.S. waters and wetlands into account.

- The opinions, in assessing the Act's congressional statement of policy, assume that the states will take on the major responsibility for protecting isolated wetlands under principles of federalism. This has not happened.

A. Importance of Hydrology

The plurality's assertion in Rapanos that wetlands that are not directly connected on the surface to a regulated body of water are beyond the scope of the Act fails to recognize the physical behavior of water in the environment. The plurality's total reliance on a surface connection entirely ignores the critical role of groundwater and local hydrological conditions in the functioning of healthy wetlands. The plurality's approach in Rapanos cannot be squared with the science of wetlands classification, which is based on several hydrological factors, only one of which entails surface connectivity, and the inherently interstate nature of all watersheds and most wetlands.

One recent analytical tool developed to help understand the hydrology of wetland function is the hydrogeomorphic (HGM) approach. Wetland hydrology, including sources of water and hydrodynamics, is typically considered the single most important factor controlling wetland ecosystem processes.

The HGM approach is based on classification—or "hydrological segregation"—that results in an organization of wetlands according to different potential functions and benefits. The U.S. Geological Survey (USGS) frequently uses a modified HGM approach to categorize wetlands. The USGS assigns categories based on the wetlands' position in the landscape, their soils and surficial geologic setting, and their sources of water.[44] Traditionally, the USGS uses the HGM approach in a wetlands permitting setting, by comparing a particular wetland to a set of defined reference wetlands that span a functional integrity spectrum, to determine the degree to which the wetland in question functions as a degraded or an undegraded example of wetlands with similar hydrology.[45]

In addition, groundwater-flow patterns and water quality in a variety of hydrogeologic settings in various wetlands are strongly affected by landscape features. These landscape features may be strongly related to bedrock or surficial lithology, geologic structure, mineral composition of the aquifer material, or a combination of any or all of them.[46] In other words, the soil, rock, and water beneath a wetland are as important—if not more so—to a well-functioning aquatic system. In hydrology every water molecule is connected to every other molecule, no matter how remote the connection may seem on the surface. To repeat, water below the surface is essential to maintaining the flow of rivers and streams. "Ground water underlies the earth's surface everywhere, and in most places, especially in humid climates, it is in direct contact with surface-water bodies. Ground water is in constant motion through flow systems of various magnitudes, and these flow systems commonly interact with surface-water bodies. As a result, ground-water flow systems can be thought of as subsurface tributaries of streams."[47]

Hydrological factors are important to the understanding of the nature and performance of wetlands. None of them is analyzed, or even discussed, in the SWANCC or Rapanos decisions. Without a technically sound, systematic understanding of how water behaves, the Supreme Court seems destined to continue to grope in the dark for solutions to problems that cannot readily accommodate strict legal determinations.

B. Weakness of the Act

A second jurisdictional problem also stems from the fact that the Act as written in 1972 has a structural weakness: it assumes that the states were to be the major players in the protection of wetlands and other waters. The Act cedes to the states "the primary responsibilities and rights" to restore, preserve, and enhance water resources.

Thirty-five states, however, have no federal or state protections in place for geographically isolated wetlands. Since SWANCC, only 14 states——Arkansas, Colorado, Florida, Indiana, Massachusetts, Montana, Nebraska, New Jersey, North Carolina, Ohio, Oregon, Rhode Island, Virginia, and Wyoming—regulate geographically isolated wetlands under state law; some of these state safeguards, however, are less than fully protective.[48] A fifteenth state, Wisconsin, subsequently enacted a law to protect "nonfederal wetlands" under state law.[49]

The issue of deciding which level of government is best able to protect the nation's natural resources is not new and not settled. "[T]here are increasing calls for transfer of responsibility for environmental protection to the states. . . . While devolution of federal power is not limited to the field of environmental protection, it does present unique problems in this area where few issues are neatly confined within state political boundaries."[50]

Nor did Congress anticipate that a number of states—such as Arizona, Georgia, Idaho, to name three examples randomly—essentially would adopt the federal wetlands program, down to and including the same definitions found in Corps regulations, as a matter of state law.[51] Thus at the very least the decision in Rapanos invites increased litigation at the state level to determine whether the states may protect isolated wetlands to the extent intended by the Corps in the federal rules.

Congress should amend the Clean Water Act to establish clear federal jurisdiction over intrinsically intrastate waters. These waters are "inseparably bound up" with traditional navigable waters due to their hydrological connection to them, which creates the "significant nexus" required. Because few streams or wetlands are truly isolated hydrologically, the broadest possible protections under the law are scientifically justified on hydrological grounds, even in the absence of any legally definable jurisdiction under the Commerce Clause.

That concludes our statement. Please contact Michael Charles of the ASCE Washington Office at (202) 789-7844 or at mcharles@asce.org if you have any questions.

# # #

ENDNOTES

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[1] NATIONAL RESEARCH COUNCIL, COMPENSATING FOR WETLAND LOSSES UNDER THE CLEAN WATER ACT 3 (2001).

[2] Hollingsworth v. Federal Min. & Smelting Co., 74 F.Supp. 1009, *1022 (D.C. Idaho 1947).

[3] U.S. Fish and Wildlife Service, Classification of Wetlands and Deepwater Habitats of the United States 3 (December 1979). The Corps of Engineers has adopted a less technical definition. "'Wetlands' are those areas 'that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.'" 40 C.F.R. § 230.3(t) (2006).

[4] L. M. Vasilas and B. L. Vasilas, Wetland Restoration and Creation Design to Restore Wetland Functions, in ASCE WATERSHED 2005 (2005). Not every wetland performs equally, however. See C.D. Abney, Designing Wetlands for Wildlife, in ASCE WETLANDS 2001: WETLANDS ENGINEERING AND RIVER RESTORATION CONFERENCE 2001 (Donald F. Hayes ed., 2001) ("Most larger, natural wetland complexes are likely to provide most or all of the potential functions described. However, smaller wetlands, including artificial wetlands, may only effectively provide one or two.")

[5] U.S. Fish & Wildlife Service, Status and Trends of Wetlands in the Conterminous United States 1998 to 2004, 16 (2004).

[6] Id. at 93.

[7] U.S. Natural Resources Conservation Service, National Resources Inventory: 2002 Annual NRI (2004).

[8] NatureServe, Biodiversity Values of Geographically Isolated Wetlands in the United States 9 (2005) *at* http://www.natureserve.org/publications/isolatedwetlands.jsp.

[9] Ralph W. Tiner, Geographically Isolated Wetlands of the United States, 23 WETLANDS 494 (2003).

[10] U.S. Environmental Protection Agency, FY02 Wetland Program Development Grants Guidelines, 66 Fed. Reg. 46,450, *46,452 (Sep. 5, 2001).

[11] U.S. Army Corps of Engineers, Clean Water Act Regulatory Programs, 58 Fed. Reg. 45,008, *45,024 (Aug. 25, 1993).

[12] NatureServe, Biodiversity Values at 17.

[13] Id. at 21-22.

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[14] Id. at 24.

[15] Id. at 39.

[16] 33 U.S.C. § 1251(a).

[17] 33 U.S.C. §§ 1311(a), 1362(12) (A).

[18] 33 U.S.C. § 1362(7).

[19] 33 U.S.C. § 1344.

[20] *See* 33 C.F.R. § 323.4 (a) (1) (i) (2006) (exempting "[n]ormal farming, silviculture and - ranching activities such as plowing, seeding, cultivating, minor drainage, and harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices" from the Act's permitting requirements).

[21] 33 U.S.C. § 407. See Lance D. Wood, Don't Be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to their Adjacent Wetlands, 34 ENVTL. L. REP. 10,187, 10,204 (2004).

[22] Natural Resources Defense Council v. Callaway, 392 F.Supp. 685 (1975).

[23] This approach followed the Court's pre-1995 Commerce Clause jurisprudence, which gave Congress full power to regulate (1) the use of the channels of interstate commerce; (2) "the instrumentalities of interstate commerce, or persons or things in interstate commerce, even though the threat may come only from intrastate activities;" and (3) "those activities having a substantial relation to interstate commerce, ... i. e., those activities that substantially affect interstate commerce." U.S. v. Morrison, 529 U.S. 598, 609 (2000) (internal citations omitted) (emphasis added).

[24] 33 C.F.R. § 328.3.

[25] "Dredged material" is material that has been excavated, or otherwise removed, from waters of the United States. 33 C.F.R. § 323.2 (c) (2006). "Fill material" is material that is placed in waters of the United States and replaces any portion of a water of the United States with dry land or changes the bottom elevation of any portion of a water of the United States. Id. § 323.2 (e) (1) (i-ii).

[26] See Gilman v. Philadelphia, 3 Wall. (70 U.S.) 713, 724-725 (1866) ("Commerce includes navigation. The power to regulate commerce comprehends the control . . . of all the navigable waters of the United States which are accessible from a State other than those in which they lie. For this purpose they are the public property of the nation, and subject to all the requisite legislation by Congress."); The Daniel Ball, 77 U.S. 577 (1870) (upholding an act of Congress requiring a federal license for a vessel engaged in the movement of passengers and cargo entirely within one state where some passengers and cargo ultimately entered interstate commerce by crossing a state line, even when the original vessel never crossed a state line).

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[27] U.S. v. Lopez, 514 U.S. 549, *555 (1995) (5-4 decision) (Stevens, J., dissenting) (invalidating the Gun-Free School Zones Act of 1990 as exceeding the Commerce Clause) (quoting U.S. v. Darby, 312 U.S. 100 (1941)).

[28] Id.; U.S. v. Morrison, 529 U.S. 598 (2000) (5-4 decision) (Souter, J., dissenting) (limiting the power of Congress under the Commerce Clause to regulate activities that are "of an apparent commercial character" and that are intrastate in nature).

[29] 474 U.S. 121 (1985).

[30] Id. at 134.

[31] Id. at 130 ("The history of the regulation underscores the absence of any requirement of inundation.")

[32] 531 U.S. 159 (2001) (5-4 decision) (Stevens, J., dissenting).

[33] 531 U.S. at 167.

[34] Tracie-Lynn Nadeau and Mark Cable Rains, Hydrological Connectivity between Headwater Streams and Downstream Waters: How Science Can Inform Policy, 43 J. AM. WATER RES. ASS'N, 119 (2007).

[35] SWANCC Supreme Court Decision: Impact on Wetlands Regulations: Hearing before the Subcomm. on Fisheries, Wildlife, and Water of the Senate Comm. on Envt. and Pub. Works, 108th Cong. 1 (2003) (statement of Sen. Crapo).

[36] 126 S.Ct. 2208, 2221.

[37] Id. at 2226.

[38] Id. at 2248.

[39] Id. at 2220 (plurality opinion) ("[T]he Act's term 'navigable waters' includes something more than traditional navigable waters."); id. at *2241 (Kennedy concurring) ("at least some wetlands fall within the scope of the term 'navigable waters.'"); id. at *2255 (Stevens dissenting) (treating wetlands adjacent to navigable waters as waters themselves advances the congressional aim of protecting water quality).

[40] Id. at *2226 (emphasis in original). Of course the Corps may regulate any waters that meet either the plurality's criterion or the Kennedy standard because the dissent explained that it would uphold federal jurisdiction whichever principle is fulfilled. See id. at *2265 (Stevens, J., dissenting).

[41] ALA.CODE 1975 § 9-9-5 (Acts 1965, No. 685, p. 1246, § 3) (emphases added).

[42] WI ADC § NR 131.06

[43] TN ADC 1200-4-7-.03

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[44] USGS, Using Hydrogeomorphic Criteria to Classify Wetlands on Mt. Desert Island, Maine—Approach, Classification System, and Examples (2005) (internal citations omitted) at http://pubs.usgs.gov/sir/2005/5244/ (last visited Jan. 3, 2007).

[45] Id.

[46] USGS, Ground-Water Discharge and Base-Flow Nitrate Loads of Nontidal Streams and their Relation to a Hydrogeomorphic Classification of the Chesapeake Bay Watershed, Middle Atlantic Coast 9 (1998) at http://pubs.usgs.gov/wri/wri98-4059 (last visited Jan. 3, 2007).

[47] Thomas C. Winter, The Role of Ground Water in Generating Streamflow in Headwater Areas and in Maintaining Base Flow, 43 J AM. WATER RES. ASS'N 23 (2007) (emphasis added).

[48] CODE ARK. R. 014 03 014 (banning the siting of waste-tire storage facilities within 200 feet of an isolated wetland); 40 FL ADC 40C-42.0265 (limiting the treatment of stormwater in wetlands to isolated wetlands); 40 FL ADC 40C-44.066 (allowing isolated wetlands to be used for water quality purposes by agricultural surface water management systems); 40 FL ADC 40C-400.475 ("Dredging and filling of isolated wetlands shall be limited to only those areas required for siting the portions of the residence and associated residential improvements which cannot be sited in uplands because there is an insufficient unrestricted area of uplands within the contiguous ownership of the applicant on which the residence and associated residential improvements can be located."); N.C. ADMIN. CODE TIT. 15A, R. 2H.1301 (allowing discharges of treated sewage into isolated wetlands and isolated classified surface waters resulting from activities which receive NPDES permits or state "non-discharge permits."); and OR. ADMIN. R. 141-120-0160 (allowing local units of government to develop isolated wetlands of less than one acre in size if the wetland has "no functions or values and has little enhancement potential . . . . .").

[49] W.S.A. 281.36 (2001-2002 Wisc. Legis. Serv. Act 6 (2001 S.B. 1)) (eff.. May 8, 2001) ("nonfederal wetlands" are defined as any wetlands that do not satisfy the SWANCC standard for regulation as a matter of federal law or that are "determined to be a nonnavigable, intrastate, and isolated wetland under the decision in" SWANCC).

[50] Andrew Hecht, Obstacles to the Devolution of Environmental Protection: States' Self-Imposed Limitations on Rulemaking, 15 DUKE ENVTL. L. & POL'Y F. 105 (2005). See also Jonathan H. Adler, Jurisdictional Mismatch in Environmental Federalism, 14 N.Y.U. ENVTL. L. J. 130 (2006) (arguing that "[t]he division of authority and responsibility for environmental protection between the federal and state governments lacks any cohesive rationale or justification.").

[51] See, e.g., A.R.S. § 49-772 ; Ga. Code Ann., § 12-5-30; I.C. § 39-7403 (56).

Statement of

Stephen E. Sandherr, CEO

on behalf of
The Associated General Contractors of America

Presented to the

Committee on Transportation and Infrastructure
U.S. House of Representatives

For a hearing on

Status of the Nation's Waters, including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

July 19, 2007

Building Your Quality of Life

The Associated General Contractors of America (AGC) is the largest and oldest national construction trade association in the United States. AGC represents more than 32,000 firms, including 7,000 of America's leading general contractors, and over 12,000 specialty-contracting firms. Over 13,000 service providers and suppliers are associated with AGC through a nationwide network of chapters. AGC contractors are engaged in the construction of the nation's commercial buildings, shopping centers, factories, warehouses, highways, bridges, tunnels, airports, waterworks facilities, waste treatment facilities, dams, water conservation projects, defense facilities, multi-family housing projects, site preparation/utilities installation for housing development, and more.

THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
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STATEMENT
STEPHEN E. SANDHERR, CEO
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
U.S. HOUSE OF REPRESENTATIVES
JULY 19, 2007

I. Introduction

On behalf of the Associated General Contractors of America (AGC), I am pleased to submit these comments on federal jurisdiction over waters and wetlands under the Clean Water Act (CWA). AGC strongly opposes H.R. 2421, the Clean Water Restoration Act of 2007, which would delete the term "navigable waters" from the CWA and subject all "waters of the United States", including all "intrastate waters," and all activities affecting such waters to federal jurisdiction. AGC encourages the Administration to undertake, and Congress to oversee, a common sense rulemaking that would establish readily identifiable limits to federal jurisdiction over waters and wetlands.

Without clear definitions to guide field staff in the regulatory agencies, permitting decisions will continue to be arbitrary and inconsistent. Vague and ambiguous regulatory provisions will continue to cause confusion, deny the regulated community fair notice of what is required, and waste time and money; all with little benefit to the environment. This lack of clarity is unduly burdensome for critical public infrastructure and private projects.

To clarify the scope of CWA jurisdiction, in light of *Rapanos v. United States* (No. 04-1034) and *Carabell v. U.S. Army Corps of Engineers* (No. 04-1384)[1] (hereinafter *Rapanos*), this Administration should move forward with a rulemaking; Congress should encourage and not pre-empt this effort by enacting H.R. 2421 or similar legislation. The commonalities between Justice Scalia's plurality opinion and Justice Kennedy's concurrence in *Rapanos* not only provide a starting point to fashion a rational policy; they also provide the Administration with an opportunity to implement balanced, effective regulations in an area that has generated endless litigation for decades. The Administration has taken a necessary first step towards a rulemaking through the issuance of joint guidance to aid regulatory agencies in making jurisdictional determinations. However, AGC believes that the guidance on its own is insufficient to provide clarity to this issue.

II. Statement of Interest

AGC is the oldest and largest of the national trade associations in the construction industry. It is a non-profit corporation founded in 1918 at the express request of President Woodrow Wilson, and it now represents more than 32,000 firms in nearly 100 chapters throughout the United States. Among the association's members are nearly 7,000 of the nation's leading general contractors, more than 12,000 specialty contractors, and more than 13,000 material suppliers and service providers to the construction industry.

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[1] *Rapanos v. United States*, 547 U.S. ___, 126 S. Ct. 2208 (2006).

AGC members engage in the construction of AGC members engage in the construction of commercial buildings and public works facilities, and they prepare the sites and install the utilities necessary for residential and commercial development. Many of their construction projects lie in "waters of the United States," within the meaning of the Clean Water Act (CWA), and therefore require federal permits. Whether their projects lie in such "waters" depends on the precise contours of that term.

Today, the contours are far from certain, and the uncertainty has become a great burden for AGC members to bear. The federal permits required for construction activity in "waters of the United States" are both costly and time-consuming to obtain. While their environmental purposes are laudable, they do add to the cost and delay of the completion of the private and public infrastructure that literally forms the foundation of our nation's economy.

At the same time, the penalties for failing to obtain a necessary permit can be severe. The civil fines can reach $32,500 per day per violation, and the criminal penalties for "negligent" violations can include fines of $50,000 per day per violation, three years' imprisonment, or both. As the "operators" of construction sites, both property owners and their construction contractors risk such fines and penalties for any failure to obtain a necessary permit. Courts have found both the owner and the constructor of a project to be responsible for compliance, at least whether the contractor has control over the discharge activity, and whether or not the contractor reasonably relied on the owner to obtain a necessary permit.

AGC is committed to protecting and restoring the nation's water resources, but it does not believe that it is in the nation's best interest to expand the Clean Water Act beyond its original scope.

III. AGC Opposes H.R. 2421, the Clean Water Restoration Act of 2007

AGC strongly opposes H.R. 2421, the Clean Water Restoration Act of 2007, which would delete the term "navigable" from the Clean Water Act and replace it with a new legislative definition of "waters of the United States" that includes all "intrastate waters" and all "activities affecting these waters." AGC believes that H.R. 2421 neither "restores" the original intent of the CWA nor "clarifies" CWA jurisdiction; rather, H.R. 2421 would create the greatest expansion of the CWA since it was signed into law in 1972.

H.R. 2421 would grant the Corps and EPA *for the first time ever* jurisdiction over all "intrastate waters"—essentially all wet areas within a state, including ground water, ditches, pipes, streets, municipal storm drains, gutters, and desert features, as well as authority over all "activities affecting these waters" (public or private, including construction), regardless of whether the activity is occurring in water or whether the activity actually adds a pollutant to the water.

H.R. 2421 changes the original intent of Congress in enacting the CWA from the Commerce Clause to the full "legislative power of Congress under the Constitution" and conflicts with CWA sections 101(b) and 101(g), which state Congressional intent to "recognize, preserve, and protect the primary responsibilities and rights of the States" to control the development and use of local land and water resources and to "allocate quantities of water within [State] jurisdiction."

The practical impacts of H.R. 2421 are many and significant. The Corps and EPA will exercise unlimited regulatory authority over all intrastate waters, including, for example, waters now considered entirely under state jurisdiction, requiring enormous resources not provided by the legislation to expand and defend the federal regulatory program and exacerbating an existing CWA funding gap and leading to longer permitting delays. So dramatically expanding federal authority over water and land use would increase the cost of and delay or stop construction projects nationwide and slow economic growth.

In fact, a study of the CWA section 404 permitting process found that obtaining a nationwide general permit took on average 313 days at a cost of $28,915. Moreover, obtaining an individual permit took on average 788 days at a cost of $271,000. *See* David Sunding and David Zilberman, *The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetlands Permitting Process*, 42 Nat. Resources J. 59 (Winter 2002).

IV. Supreme Court Provides Starting Point for Administrative Rulemaking

AGC seeks to ensure that the construction industry can continue to contribute to the nation's quality of life. In light of the U.S. Supreme Court's U.S. Supreme Court's decisions in *Rapanos*, and for the reasons outlined below, AGC supports a rulemaking by the Administration to clarify federal limits over waters and wetlands and opposes legislation, such as H.R. 2421, the Clean Water Restoration Act of 2007, which would overly extend the jurisdictional reach of the CWA.

In the *Rapanos* decision, the Court vacated prior rulings by the U.S. Court of Appeals for the Sixth Circuit that the federal government has jurisdiction over wetlands connected in any way to actually navigable waters. These cases themselves involved wetlands adjacent to a series of drainage ditches, non-navigable creeks and culverts, and wetlands separated from a drainage ditch by a berm. In both cases, the Sixth Circuit held that the wetlands are "waters of the United States" because they are hydrologically connected to navigable waters.

The Supreme Court vacated these decisions—with a majority of the Court agreeing that the Corps had overstepped its bounds—and remanded the cases to the lower court for further inquiry into the facts. Four Justices (Justices Scalia, Thomas, Alito and Chief Justice Roberts) reasoned that the CWA authorizes federal jurisdiction over "only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic features' that are described in ordinary parlance as 'streams [,] ... oceans, rivers, [and] lakes,'" and that the statute excludes from federal jurisdiction "channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall."[2] These four Justices also interpreted the CWA to cover "*only* those wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right" such that it is "difficult to determine where the 'water' ends and the 'wetland' begins."[3]

Justice Kennedy concurred in the judgment but for different reasons. He reasoned that the "significant nexus" standard is the operative standard for determining whether a non-navigable water should be regulated under the CWA. In his concurring opinion, he repeatedly emphasized the importance of the relationship to traditional navigable waters, stating that to be a "water of the United States," a non-navigable water must "perform important functions for an aquatic system incorporating navigable water,"[4] or "play an important role in the integrity of an aquatic system comprising navigable waters as traditionally understood."[5]

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[2] Scalia, slip op. at 20-21.

[3] Scalia, slip op. at 23-24.

The remaining four Justices (Justices Stevens, Souter, Ginsburg and Breyer) expansively interpreted the CWA to grant the Corps and the U.S. Environmental Protection Agency (EPA) jurisdiction over waters and wetlands only remotely connected to traditional navigable waters. While some have made much of the dissenting opinion, these four Justices did not concur in the judgment.

Chief Justice Roberts, lamenting this fractured result, pointed to *Grutter v. Bollinger*[6] and *Marks v. United States*[7] as a guide for lower courts in interpreting *Rapanos*. "When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, 'the holding of the Court may be viewed as that position taken by those Members who concurred in the judgment on the narrowest grounds.'"[8] AGC believes it clear that it was Justice Kennedy who "concurred in the judgment on the narrowest grounds." AGC believes it equally clear that his opinion identifies important limitations on federal jurisdiction under the CWA and specific principles that the federal government must consider in making any jurisdictional determinations.

a. AGC Deems a 'Case-by-Case' Standard Unworkable

Following *Rapanos*, to establish that non-navigable water (including a non-navigable wetland) is a "water of the United States," AGC believes that the agencies must measure and establish the nature of the non-navigable water's connection to, and relationship with, traditional navigable waters. The agencies have not undertaken such a review in the past, and Chief Justice Robert lamented the "unfortunate" fact that, in the absence of any further guidance, "lower courts and regulated entities will now have to feel their way on a case-by-case basis."[9]

Proceeding on a case-by-case basis is unacceptable to AGC. It would greatly increase the costs associated with processing permits and the days spent waiting for their issuance. As noted by Justice Scalia in the plurality opinion, the regulated community is already spending about $1.7 billion annually to obtain CWA Section 404 discharge permits.[10] (What is more, the study he cites in support of this figure does not appear to include either the costs or time associated with ascertaining whether the property in question is appropriately subject to federal jurisdiction under the CWA.[11]) Given the issues that *Rapanos* has raised, applicants are likely to suffer even longer delays and incur additional costs while trying to determine whether or not their property is subject to federal jurisdiction.

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[4] Kennedy, slip op. at 24.
[5] Kennedy, slip op. at 25.
[6] 539 U.S. 306, 325 (2003).
[7] 430 U.S. 188, 193 (1977).
[8] *Id.* at 193.
[9] Roberts, slip op. at 2.
[10] Scalia, slip op. at 2.
[11] Sunding & Zilberman, "The Economics of Environmental Regulation by Licensing: An Assessment of Recent Changes to the Wetland Permitting Process," 42 Natural Resources J. 59, 74-76, 81 (2002).

b. AGC Calls for Administrative Proceedings

AGC believes that the *Rapanos* decision seriously conflicts with EPA's and the Corps' current regulations on "waters of the United States"[12] and that the two agencies need to launch an immediate effort to update those regulations. We agree with four of the Justices who specifically suggested a clarifying rule.[13] The Court's plurality noted "the immense expansion of federal regulation of land use that has occurred under the Clean Water Act—without any change in the governing statute—during the past five Presidential administrations."[14] AGC urges Congress to instruct the Corps and EPA to issue new rules that adhere to the commonalities between Justice Scalia's plurality opinion and Justice Kennedy's concurrence.

AGC believes it is clear that Justice Kennedy's opinion establishes important limitations on the Corps and EPA's authority to regulate work in water and wetlands and identifies certain principles that the Corps must consider in determining whether non-navigable waters have the requisite nexus with traditional navigable waters, as follows—

- The federal government may no longer regulate non-navigable waters or wetlands based solely on their mere hydrological connection to a navigable waterbody.
- The federal government may not rigidly insist that an "ordinary high water mark" is the appropriate measure for identifying jurisdictional tributaries.

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[12] The existing CWA regulations define "waters of the United States" as follows:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including such waters:
  (i) which are or could be used by interstate or foreign travelers for recreational or other purposes;
  (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  (iii) which are used or could be used for industrial purposes by industries in interstate commerce;
(4) All impoundment of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section.
  Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.
(8) Waters of the United States do not include prior converted cropland...

Different CWA regulations contain slightly different formulations of the definition. For simplicity's sake, these comments refer to the Corps' version at 33 CFR § 328.3(a). Other versions appear at, e.g., 40 CFR §§ 110.1, 112.2, 116.3, 117.1, 122.2, 230.3(s), and 232.2.

[13] *Rapanos v. United States*, 547 U.S. ___, slip op. at 25 (Kennedy, J. concurring); *Id.*, slip op. at 2 (Roberts, C.J. concurring); *Id.*, slip op. at 14 (Stevens, J. dissenting; and *Id.*, slip op. at 2 (Breyer, J. dissenting).

[14] Scalia, slip op. at 3.

- The federal government may no longer consider all "connected" waters to be tributaries and may not automatically assert jurisdiction over any wetland "adjacent" to such connected waters.
- The federal government may no longer regulate "isolated" waters and wetlands.

In *Rapanos*, Justice Kennedy rejects the Corps' practice of asserting jurisdiction over any non-navigable water that has any hydrological connection to any navigable water. Justice Kennedy holds that to be jurisdictional, a non-navigable waterbody's relationship with traditional navigable waters must be "substantial:"

> [M]ere hydrologic connection should not suffice in all cases; the connection may be too insubstantial for the hydrologic linkage to establish the required nexus with navigable waters as traditionally understood.[15]

Inappropriately, the government's principle test for jurisdiction has been any hydrological connection to traditional navigable waters. Based on the assumption that water flows down hill, the Corps has asserted jurisdiction over non-navigable waters without even considering how far they lie from navigable water, how frequently they carry water, or how much water they carry.

Now, to establish that a non-navigable water (including a non-navigable wetland) is a "water of the United States," it is apparent that the agencies must measure and establish the nature of the non-navigable water's connection to, and relationship with, traditional navigable waters. To illustrate this point, Justice Kennedy requires, for non-navigable wetlands, a showing that:

> [T]he wetlands, either alone, or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term, 'navigable waters.'[16]

Justice Kennedy also rejects the Corps' current approach to identifying "tributaries." Specifically, Justice Kennedy calls into question the Corps' use of "ordinary high water mark" (OHWM) as a measure for identifying tributaries. He starts by noting that the "Corps views tributaries as within its jurisdiction if they carry a perceptible 'ordinary high water mark.'[17] Ultimately, he concludes that the current regulations, as applied by Corps, stray too far from traditional navigable waters:

> [T]he breadth of this standard—which seems to leave wide room for regulation of drains, ditches, and streams remote from any navigable-in-fact water and carry only minor water-volumes towards it—precludes its adoption as a determinative measure ... Indeed, in many cases wetlands adjacent to tributaries covered by this standard might appear little more related to navigable-in-fact waters than were the isolated ponds held to fall beyond the Act's scope in *SWANCC*.[18]

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[15] Kennedy, slip op. at 28.
[16] Kennedy, slip op. at 23.
[17] 33 CFR 328.4(c); 65 Fed. Reg. 12,823 (2000).
[18] Kennedy, slip op. at 24-25.

Justice Scalia was likewise unpersuaded by the Corps' treatment of "tributaries" and use of OHWM.[19] Inappropriately, the Corps has been using the presence of an OHWM (which it defines in terms of physical characteristics, not ordinary flow) to claim federal jurisdiction over many ditches, dry desert drainages, swales, and gullies.

In addition, Justice Kennedy rejects the government's notion that the Corps may regulate all wetlands that are adjacent to all tributaries. Justice Kennedy's rejection of the Corps' tributary standard leads him also to reject the Corps' practice of regulating all wetlands that are adjacent to all tributaries. He finds that "[a]bsent more specific regulations, ... the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries."[20] Justice Kennedy adds that the Corps "[t]hrough regulations or adjudication may choose to identify categories of tributaries that, due to their volume of flow (either annually or on average), their proximity to navigable waters, or other relevant considerations, are significant enough that wetlands adjacent to them are likely..." to have a significant nexus to navigable waters.[21] He repeatedly cautions that "insubstantial," "speculative," or "minor flows" are insufficient to establish a "significant nexus."[22]

Inappropriately, the Corps' current definition of "adjacent" purports to allow the federal government to control all wetlands that are "bordering, neighboring, or contiguous" to any of the waters covered in the regulation at Section 328.3(a)(1)-(7) (the seven categories of waters of the United States), including all tributaries, however defined.

Finally, Justice Kennedy confirms that nonnavigable, isolated, intrastate waters are not jurisdictional.[23] This was the opinion of the Court in its 2001 decision in *SWANCC*.[24] Some interests have disputed this interpretation, claiming that such waters are beyond the scope of the CWA only where the only basis for asserting federal CWA jurisdiction is the use of such waters by migratory birds. But the Court in *Rapanos* clarified its previous decision. Under the plurality opinion in *Rapanos,* all isolated water and wetlands are clearly outside the authority of the federal agencies under the CWA. Justice Kennedy in his concurring opinion cites *SWANCC's* "holding" that "nonnavigable, isolated, intrastate waters" are not "navigable waters . . . ."[25]

Following *SWANCC*, the Corps has continued to inappropriately regulate any water/wetland that is not isolated by claiming that all connected waters are tributaries.

In sum, Justice Kennedy's analysis in *Rapanos* calls into question the Corps' current regulations at 33 CFR Section 328.3(a)(5) (tributaries) and (a)(7) (adjacent wetlands). The definitions of "adjacent" at Section 328.3(c) and "ordinary high water mark" at 33 CFR Section 328.3(e) are similarly suspect. Further, Justice Kennedy is writing against the backdrop of *SWANCC*, in which the Supreme Court had previously rejected the "other waters" regulation at 33 CFR Section 328.3(a)(3).

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[19] Scalia, slip op. at 6-9.

[20] Kennedy, slip op. at 25.

[21] Kennedy, slip op. at 24.

22 Kennedy, slip op. at 22-24.

[23] Current regulations define "isolated waters" as those non-tidal waters of the United States that are (1) not part of a surface tributary system to interstate or navigable waters; and (2) not adjacent to such tributary waterbodies. 33 CFR § 330.2(e)(2005).

[24] *Solid Waste Agency of Northern Cook County(SWANCC) v. U.S. Army Corps of Engineers,* 531 U.S. 159 (2001).

[25] Kennedy, slip. op. at 17.

V. Corps/EPA Joint Guidance Not Enough

On June 5, 2007 the Corps and EPA jointly issued guidance regarding the scope of CWA jurisdiction following *Rapanos*. The agencies also issued an accompanying instructional guidebook to aid regulators and the public in making jurisdictional determinations. During the first 180 days implementing the guidance, the agencies will accept public comments on related case studies and experiences.

The guidance will influence regulators' decisions on whether CWA section 404 discharge permits are required—*and whether they will be issued*—for construction activities impacting wetlands, tributaries, and other waters. It will also impact civil and criminal environmental enforcement. Many jurisdictional determinations beyond traditional navigable waters and their adjacent wetlands will be decided on a case-by-case basis according to a "significant nexus" test described in the guidance. The agencies also announced in the guidance hydrologic features that they generally will not assert jurisdiction over, including roadside ditches as long as they are excavated wholly in and only drain upland and do not carry a relatively permanent flow of water (i.e., less than three months).

During the 180-day comment period, AGC will evaluate the practical implementation of the joint guidance and provide comments to the agencies as appropriate. However, AGC believes that the issuance of the guidance, imperfect or not, is a necessary and first step towards the Administrative rulemaking recommended by the Supreme Court in *Rapanos*.

VI. Conclusion

AGC strongly opposes H.R. 2421, the Clean Water Restoration Act of 2007, or similar legislation that would redefine federal jurisdiction under the CWA and pre-empt the administrative rulemaking the Supreme Court recommended and provided important direction for in *Rapanos*. The Administration has taken a first and necessary step by issuing joint Corps/EPA guidance. Rather than obstruct this effort, Congress should encourage and oversee a subsequent rulemaking to provide further and long overdue clarity to CWA jurisdictional issues involving waters and wetlands. Doing so will allow the regulated community to continue to deliver critical infrastructure projects in a timely and cost-effective manner, while protecting and enhancing the environment.

Thank you.

WRITTEN STATEMENT OF THE EDISON ELECTRIC INSTITUTE ON CLEAN WATER ACT JURISDICTIONAL ISSUES

IN THE 110TH CONGRESS BEFORE THE HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

July 19, 2007

The Edison Electric Institute ("EEI") is submitting this statement in connection with the hearings being held by the House Transportation and Infrastructure Committee relating to the status of the nation's waters under the jurisdiction of the Clean Water Act ("the CWA" or "the Act."). We are pleased to have this opportunity to present our views, in particular regarding the potential impacts on the regulated community of H.R. 2421, the "Clean Water Restoration Act of 2007" ("CWARA").

EEI is the association of the nation's shareholder-owned electric utility companies and industry affiliates and associates worldwide, including companies that generate, transmit, and distribute electricity and provide an array of energy and other services to their customers. Our Alliance of Energy Suppliers division represents integrated, affiliate, and independent power producers, generators, and power marketers in the United States wholesale electricity markets. EEI's members generate almost 60 percent of all electricity generated by electric companies in the country, and serve approximately 70 percent of all ultimate customers nationwide.

Energy is the lifeblood of our nation's economy, which is highly dependent on affordable and reliable supplies of energy, including electricity. In fact, economic and energy growth often parallel each other. Furthermore, families, communities, and businesses across the country depend on a ready supply of electricity for heating and cooling homes, cooking and storing food, indoor and outdoor lights, computers, medical facilities, traffic signals, and the host of other essential facilities we often take for granted. In order to provide this electricity, EEI members build, operate and maintain electric generation, transmission, and distribution facilities nationwide.

Water is critical to the functioning of most electric generation facilities. For example, steam electric generating facilities often rely on water to operate and to cool turbines, to isolate and manage generation process emissions and wastes, and for other important uses. Similarly, hydropower generation facilities rely on water as the primary source of energy. In addition, generation, transmission, and distribution facilities may be built near or across wetlands or other water bodies, with the potential to affect those water bodies.

As a result, electric utilities are directly affected by the CWA. Generating facilities that discharge into navigable waters are required to obtain permits under section 402 of the Act, and the permits reflect effluent limitations and standards set under sections 301, 303, 306, and 316 of the Act. Federally permitted facilities, such as hydropower projects licensed by the Federal Energy Regulatory Commission ("FERC"), trigger section 401 of the CWA. Under that section, states ensure that the facilities meet applicable water quality standards and effluent limitations. Further, facilities that affect wetlands or involve dredge and fill activities can require permits under section 404 of the CWA, section 10 of the Rivers and Harbors Act ("RHA"), or both.

EEI's members pride themselves on careful and proactive management of their environmental responsibilities, including their responsibilities under the CWA. They use state-of-the-art environmental programs, management systems, and other practices that not only are directed at compliance with environmental requirements, but also foster innovative and practical pollution abatement and prevention measures, with positive results for the environment and electricity consumers. At the same time, EEI members provide an essential service. They have an obligation to ensure that electricity is provided reliably, efficiently, and economically, with as little impact to the environment as possible.

H.R. 2421 proposes to expand the array of waters and human activities covered by the CWA, without a clear indication of the need to do so or a demonstration that the environmental benefits would exceed the substantial additional cost. The bill would significantly increase the permitting burden on the regulated community and on the U.S. Environmental Protection Agency ("EPA"), the U.S. Army Corps of Engineers ("the Corps"), and states, including local municipalities that provide essential services, which are responsible for implementing the CWA permitting programs. The bill would require significant additional studies, recordkeeping, reporting, and permits far out of proportion to the impact of the activities on the environment – at a cost that would exceed any benefits to the environment.

EEI supports the goals of the CWA to protect and improve the quality of the Nation's waters. But the CWA's current approach to the regulation of water pollution is basically sound. The CWA represents a careful balance among federal, state, and local regulation of water quality and use. Furthermore, the Act already covers the vast majority of waters of the United States, including not only navigable streams, lakes, and marine waters, but also tributaries to such waters and waters connected to them in any direct way. In addition, the Act already covers the primary sources of human impacts on those waters. Recent Supreme Court decisions have not changed that.

Therefore, the CWA does not need to be modified as proposed in H.R. 2421. EEI urges the Committee to refrain from broadly expanding the scope of the CWA as proposed in CWARA.

I. EEI URGES THE COMMITTEE NOT TO EXPAND THE JURISDICTIONAL REACH OF THE CWA AS PROPOSED IN CWARA

Some have characterized CWARA as seeking to reestablish the jurisdictional reach of the CWA prior to the Supreme Court's recent decisions in *SWANCC*, *Rapanos*, and

Carabell.[1] However, CWARA would broadly expand the reach of the CWA into large new areas that the CWA has not reached in the past.

Under the proposed wording of CWARA, the CWA would be modified to apply to any waters subject to the legislative power of Congress and any activities affecting those waters. This would include waters that do not have a direct nexus to navigable waters and their tributaries, such as mudflats, potholes, and other isolated waters. Without clarification, it may also include waste treatment impoundments, which are specifically designed to retain and manage waste and cannot be subject to generally applicable water quality requirements without defeating the purpose of the impoundments. Similarly, CWARA may also be read to include groundwater, which traditionally has been regulated by states with a carefully targeted, supporting federal overlay, such as the wellhead protection, sole source aquifer, and underground injection control provisions of the Safe Drinking Water Act and underground storage tank provisions of Resource Conservation and Recovery Act.

Such a broad expansion of the reach of the CWA would mean that many more human activities would be subject to federal regulatory and permitting requirements than have traditionally been covered by those requirements. Those newly covered activities are currently overseen by state and local governments under their respective environmental laws and for which they already use local police power to protect the environment. By elevating them to a federal level, Congress would import an array of complex regulations and permitting under the CWA and a host of other federal environmental statues such as the National Environmental Policy Act, Endangered Species Act, National Historic Preservation Act, and Coastal Zone Management Act.

In addition, many of the CWA water quality standard and permitting programs are managed by states, with oversight by EPA and the Corps, through longstanding and largely successful state delegated programs. By increasing the array of waters and human activities covered by the Act, CWARA would impose a major new unfunded federal mandate on the states. States already are required to meet a host of EPA and Corps regulatory requirements, and those requirements are constantly being tightened. By expanding the numbers and types of waters and activities covered by the Act, CWARA would directly increase the burden on states and the regulated community, without providing additional resources to manage this burden.

Ironically, this broad expansion of the CWA and its burden on states and the regulated community would come without clear net benefits. The Supreme Court's opinions in *SWANCC*, *Rapanos*, and *Carabell* carefully retain federal regulatory authority to address primary water quality issues across the nation. Navigable water bodies, their tributaries, and waters adjacent to them with a significant nexus to those waters remain fully covered by the CWA. That covers the vast majority of the surface water in the United States.

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[1] *Solid Waste Agency v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001); *Rapanos v. United States & Carabell v. U.S. Army Corps of Engineers*, 126 S. Ct. 2208 (2006).

Furthermore, human activities that involve discharges to or other impacts on those waters are covered by the CWA, unless specifically exempted by the Act or regulations. Under the Supreme Court's Tacoma decision,[2] the Act's reach as to regulating such activities is very broad indeed – covering both water quality and quantity issues across a very broad spectrum. These existing areas of CWA jurisdiction already ensure robust regulation of industrial, construction, farming, forestry, and other human activities as they affect the vast majority of U.S. waters.

This CWA regulation already comes at a steep cost in federal, state, local, and private resources (*i.e.,* dollars, human resources and time). To expand the reach of the Act would substantially increase this cost without corresponding benefits. CWARA would extend the CWA to remote waters and could be interpreted to extend the Act to treatment impoundments and groundwater, when those types of water either are regulated by states and localities today or such regulation is inappropriate or unwarranted. CWARA also would cover any human activities that may affect water, without regard to whether a discharge is involved, the nature of the impact, and the cost of imposing a federal regulatory array on the activities. For example, in terms of evaluating the impact of CWARA on the ability of electric utilities to manage rights-of-way for reliability we see no limit on the potential for EPA and the Corps to assert jurisdiction over every activity affecting the ground, a wet spot, a puddle, a gully, or the water table. The result would be a significant expansion in permitting requirements for electricity facilities and increased potential liability from citizen suits.

To expand the CWA to include a new array of remote or inappropriate waters under the full panoply of federal regulations is likely to have limited benefit. But as in any program that seeks to address the last small effects of human activity, it would come at substantial cost.

Furthermore, if Congress were to enact CWARA, EPA, the Corps, and state water quality agencies would have to fundamentally revisit their entire array of regulations under the CWA. The current water quality standard, effluent limitation, and permitting regulations have been developed in the context of navigable waters, tributaries, and waters directly linked to them, and with a careful focus on discharges. The agencies would have to re-examine all of these programs to ensure proper fit and application in the context of the broadly expanded array of waters and human activities. This regulatory re-examination would be enormously complex, costly, and time consuming and would necessarily redirect those agencies from conducting current tasks.

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[2] *PUD No. 1 v. Washington Dep't of Ecology*, 511 U.S. 700 (1994).

II. EEI ENCOURAGES THE COMMITTEE TO PRESERVE THE "WASTE TREATMENT SYSTEM" EXCEPTION

EPA's definition of "waters of the United States" in 40 C.F.R. 122.2 specifies that "waste treatment systems" designed to meet the requirements of the CWA are *not* waters of the United States. Many companies have relied on this exception for their cooling ponds and other treatment facilities.

Many utility companies have constructed cooling ponds, settling basins, ash ponds, and other impoundments for the purpose of treating pollutants, and these treatment systems have largely not been considered as "waters of the United States" but rather as industrial facilities for pollution control. Changing the definition of "waters of the United States" could change the legal status of those facilities in a single stroke, putting them into noncompliance with the Act, and leaving power companies with the task of trying to find a way to comply under the new statutory definition. This would have enormous repercussions for energy supply and have an immense cost to the economy.

For example, if treatment systems are not clearly excluded from regulation as jurisdictional waters, they could be required to meet stringent water quality standards at the point of discharge into waste treatment systems rather than the point of discharge from the systems into jurisdictional waters. Such a requirement would effectively defeat their underlying treatment purpose.

To give an idea of the potential costs, utilities frequently rely on cooling water impoundments to reduce the temperature of water used to cool steam electric plants. If such impoundments were required to comply with CWA requirements developed for navigable streams, lakes, and marine waters, companies would have to adopt alternative systems such as cooling towers. But such alternative technologies often cannot be retrofitted at existing plants, and if they can be retrofitted, the economic and energy cost to do so is prohibitive. For example, EPA has estimated that to convert an existing power plant to cooling towers generally would cost from $130 million to $200 million, with annual operating costs of $4 million to $20 million. The Department of Energy has estimated that retrofitting cooling towers to an electric generating plant, fossil or nuclear, would impose a capital cost of $65 to $128 per kW and a loss of net generation output of 1.1 percent to 2.1 percent (2002 dollars). In today's market, and in combination with other anticipated regulatory impacts, such costs could challenge the economic viability of some facilities. In addition, installing the necessary retrofits could take up to ten months, resulting in potentially substantial loss in energy production.

Similarly, there are approximately 450 coal-fired utility power plants and roughly 600 active ash treatment facilities in the U.S., with approximately equal proportions of landfills and surface impoundments. These facilities are designed to manage coal combustion products ("CCPs") – coal fly ash, bottom ash, boiler slag, and flue gas desulfurization materials – produced from the combustion of coal for the generation of electricity. The facilities are constructed and operated so as to limit the migration of constituents of concern (*e.g.,* metals present in coal ash) from the unit into the environment (*e.g.,* surface water, groundwater).

If these CCP treatment systems were considered "waters of the United States," they would have to meet water quality standards within the facility. But there is no proven, readily available technology to assure that such facilities could meet such internal limits. While a certain amount of chemical fixation and precipitation of dissolved metals does occur within the management units, a requirement to meet water quality standards within the units would be practically impossible. As a result, companies would have to convert to alternative technologies such as dry ash handling, if feasible. Closure of a single ash pond would cost as much as $20 million. The conversion to dry ash handling itself could cost as much as $50 million per power plant. Initial capital costs associated with the permitting and construction of a new ash management landfill could be $10 million. Long-term capital and O&M costs would be another $50 million. In addition, it would take at least 3 to 5 years to complete the process of new facility design, permitting and construction. If existing ash impoundments were forced to close, power plants that rely on such units for the management of their CCPs would likely be forced to shut-down.

III. EEI ENCOURAGES THE COMMITTEE TO ASSURE AN EFFECTIVE NATIONWIDE PERMIT PROGRAM UNDER CWA SECTION 404

The siting, construction, maintenance, and repair of generation, transmission, and distribution facilities can involve locating facilities and conducting activities on or near wetlands or other water bodies. In particular, transmission and distribution lines – because they often cover long distances – may cross wetlands or water bodies at some points. As a result, depending on the nature of their activities, electric utilities may need to obtain "dredge and fill" permits under section 404 of the CWA. Therefore, EEI member companies are keenly interested in how the Corps and EPA administer the CWA section 404 and CWA other programs.

Over the years since the CWA was enacted, the Corps and EPA have sought to craft a regulatory program under section 404 that carefully protects the environment and is administratively feasible. Recognizing that a large number of human activities can affect wetlands and other water bodies, the agencies have used a permit program that divides human activities into categories and tailors the regulatory requirements to each category based on its typical effects on the environment. Low-impact activities often will be covered by a "nationwide permit" that imposes conditions without having to obtain individual EPA or Corps approval, unless atypical environmental effects are involved. This has enabled the agencies and the regulated community to focus on activities that raise more significant concerns, while ensuring that lower-impact activities are still undertaken with care to minimize environmental effects.

EEI has encouraged EPA and the Corps to balance economic development and wetlands protection under these programs, and it is important to retain this careful balance in the future. In particular, new transmission lines are increasingly needed to maintain reliability, transmit renewable energy from where it is generated to where it is consumed, and to support competitive regional electricity markets. However, obtaining regulatory approvals for new transmission projects from federal, state, and local agencies is a complex process that can lead to costly delays. Multiple government agencies are involved in right-of-way authorizations and related environmental permitting, including the Corps and EPA under section 404.

Congress should assure an effective section 404 nationwide permit program. Also, Congress should recognize that if CWARA is enacted, EPA and the Corps will need to ensure that the program remains viable as a new array of waters and human activities are swept under the CWA umbrella.

EEI appreciates this opportunity to provide our views on issues of jurisdiction under the Clean Water Act, especially as they directly affect the electric power sector.

Statement of

The National Stone, Sand & Gravel Association

To the
House Committee on Transportation and Infrastructure
U.S. House of Representatives

On the
"Status of the Nation's Waters, Including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act"

July 19, 2007

Mr. Chairman and Members of the Committee:

On behalf of the National Stone, Sand & Gravel Association (NSSGA), we are pleased to offer this testimony on the status of the nation's waters, including wetlands, under the jurisdiction of the Federal Water Pollution Control Act. NSSGA and its member companies have been involved in numerous court cases regarding jurisdictional issues surrounding the Clean Water Act (CWA). We recognize the goals of the CWA and support the regulators in implementing this complex law. Our members, however, believe the current CWA Section 404 program is inadequate in protecting wetlands and we are opposed to expanding the jurisdiction of the CWA due to the unintended consequences which could have a negative impact on, and limit access to, essential aggregate deposits.

According to the U.S. Geological Survey, NSSGA is the largest mining association by product volume in the world and represents the crushed stone, sand and gravel-or aggregate-industries. Our member companies produce more than 92 percent of the crushed stone and 72 percent of the sand and gravel consumed annually in the United States. More than three billion tons of aggregates (or 2.95 billion metric tons) were produced in 2006 at a value of approximately $21 billion, contributing nearly $40 billion to the GDP of the United States. Without these important commodities, the nation's infrastructure could not be built or maintained, and the commerce and quality of life would be severely reduced. The aggregates industry workforce is made up of about 118,000 men and women. Every $1 million in aggregate sales creates 19.5 jobs, and every dollar of industry output returns $1.58 to the economy. With over 11,000 operations nationwide, most Congressional Districts are home to multiple operations.

The members of the NSSGA recognize that the Earth's resources, upon which all life depends, are finite, and that wise environmental stewardship is necessary today to preserve the potential for a quality life for future generations. Accordingly, the Association adopted Environmental Guiding Principles which are attached in Appendix 1. The members of NSSGA also identify the concept of sustainability as a business approach that integrates environmental, social and economic aspects to ensure the long-term supply of aggregate materials to society. This month, NSSGA's Board of Directors adopted the sustainability principles which are attached in Appendix 2. As a highly regulated industry, NSSGA is proud that our members go above and beyond what the law and regulations require, wherever possible.

In addition NSSGA encourages its members to adopt and implement an Environmental Management System (EMS) program to meet its environmental requirements and improve its overall performance. An EMS is a continual cycle of planning, implementing, reviewing and improving the actions that an organization takes to meet its environmental goals. NSSGA developed its own EMS template for the aggregates industry that provides a logical step-by-step system for assigning responsibility, evaluating practices, procedures, and processes, and allocation of resources based on the Plan, Do, Act, Check management system approach. We would like to highlight the fact that in a letter dated May 28, 2002, the Environmental Protection Agency commended NSSGA for "developing EMS guidelines that will assist its members in meeting the criteria for the National Environmental Performance Track Program."

Post Rapanos Regulatory Environment

NSSGA believes the regulatory process is a precept fundamental to implementation of the nation's laws. The basic purpose of rulemaking is to afford stakeholders the due process required by law to provide a reasoned forum that allows all interested parties to comment on proposed rulemakings to ensure regulators have the most complete set of data and testimony so that informed decisions can be made. NSSGA has concerns about certain aspects of the recently issued wetlands guidance pursuant to the Supreme Court's decision in Rapanos. We plan to use the six-month public comment time-frame in the guidance to determine how the new guidance will impact the aggregates industry.

Although NSSGA member companies are proud of their work in preserving the environment and ensuring a high quality of life for future generations, NSSGA strongly believes that the Section 404 program should do a better job of protecting important wetlands based on the value and function of those wetlands. The Section 404 program is often used to stop growth of any kind and has further been used to assert regulatory jurisdiction over incidental wetlands created in upland areas at aggregate mining properties before all mining and reclamation is completed.

Current Legislative Proposals

To date, only one bill has been introduced in the 110th Congress that deals with CWA jurisdiction and it is titled the "Clean Water Restoration Act" (H.R. 2421). NSSGA believes the bill would impose another layer of regulation on an already highly regulated industry at both the Federal and state level. Additionally, NSSGA is concerned that certain terms used in the bill are sufficiently vague that their interpretation could have severe unintended consequences on the future of our business.

NSSGA does not believe H.R. 2421 simply "restores the original intent of Congress" which was to "restore the chemical, physical and biological integrity of the nation's waters." NSSGA certainly believes and supports the restoration of the nation's waterways and wetlands. However, the "savings clause" in the bill does not directly address many of the waters that are found at aggregate operations, farming ponds, or other isolated, non-navigable, intrastate, upland water bodies created incidentally to any earth-moving activity.

By removing the term "navigable" from the CWA, the reach of the agencies now becomes one of theoretical hydrological interpretation rather than one of direct observation of a water conveyance system between a wetland/water of the U.S. and a flowing stream. In other words, the agencies will now have the ability to look at subsurface groundwater connections as opposed to physical above ground water conveyances or conduits. This IS an expansion from the CWA jurisdiction of the past at least for water bodies or wetlands that are removed from any adjacent or abutting flowing streams.

The legislation would create a one-size fits all approach to federal regulations by essentially declaring that all wet areas, infrequently wet areas, and any activities that may affect those wet areas are subject to federal jurisdiction under the CWA. Specifically, the approach taken in Section 4 of H.R. 2421 defines "Waters of the United States" with an inclusive list of types of water and does not include any exclusion. NSSGA believes the courts will interpret Section 4 as not limiting jurisdiction in any way, thus extending CWA authority over any wet area or infrequently wet area and to any activity that may affect those areas. Regrettably, the legislation does not differentiate between a spring mud puddle in the middle of an aggregate operation and an actual wetland that provides benefits to wildlife, flood protection, or water filtration.

For example, the legislation would allow CWA jurisdiction over man-made ponds in upland-areas at aggregate operations used in conjunction with the normal course of business. These ponds are used in a variety of ways, including: washing aggregate to meet the specifications of customers (notably state Departments of Transportation); for dust suppression to control fugitive dust; and for vehicle wheel washes to eliminate tracking of aggregate material onto the public right-of-way. These ponds may take on, over the course of time, various characteristics of hydric soils or hydric vegetation, even thought they are created in upland areas and have no hydrological connection to any flowing traditionally jurisdictional stream. Forcing these operations to obtain CWA permits for these incidentally created, man-made, isolated upland ponds is tantamount to bad public policy based on and poorly conceived science.

This legislation does not give the regulators the authority to exempt such ponds. To be more specific, the savings clause inserted into the legislation would, in our opinion, actually limit the regulators ability to make such common-sense determinations.

Another hurdle faced by aggregate operations with regard to H.R. 2421, is the vague phrase "activities affecting these waters" included in Section 4. These four simple words can be interpreted to mean different things by reasonable people because "activities" is not defined. NSSGA believes this will be a focus of additional unnecessary, expensive and time-consuming litigation.

This phrase also has the potential unintended consequence of giving the Federal government a veto over land-use planning power simply because any activity that is near wet areas or infrequent wet areas would need a CWA permit. For those citizen or environmental groups that oppose virtually all public works projects, this phrase would provide another means to oppose a project that has been approved at the local level. The unintended consequence of this language could virtually federalize local land use planning.

After an area has been mined, operators begin the process of reclamation and could again find themselves under the broad jurisdiction of the CWA proposed by H.R. 2421. During this reclamation period operators return the land to a useable form to benefit the local community. Some of the uses of reclaimed quarries include: nature preserves, recreation areas, golf courses, housing subdivisions, water reservoirs, industrial parks, shopping centers, or any other use approved by the local zoning board. Any man-made water body created incidentally to mining or reclamation would meet the broad CWA jurisdiction of HR 2421. Even if the pond is altered or expanded, this legislation would require a permit and possibly mitigation.

NSSGA also is concerned about the possibility of siting future aggregate operations. Currently it takes a considerable investment of time and money to locate a suitable deposit for mining, determine if the aggregate is of sufficient quantity and quality for development, and make it through the local, state and federal permitting process. For example, in California, a recent study warned that the state does not have sufficient aggregate reserves available to meet the needs of the communities unless additional deposits are located, permitted and developed within the next 15 years. However, it takes on average 12 years to site and permit a new aggregate operation within the state of California. Florida is experiencing similar difficulties in siting or expanding aggregate operations.

Legislation like H.R. 2421 could delay the permitting process further as all potentially jurisdictional areas must be identified, thus delaying an already over-taxed permitting process of the federal government as well as having unintended consequences on the aggregate operator's ability to conduct business.

Unfortunately, the savings clause that purportedly limits the impact on the mining sector actually creates more confusion. Section 6 is constructed in a manner that creates two major problems. First, only discharges of storm water would be exempted at aggregate operations, however other potential areas of CWA jurisdiction would stand. This will cause enormous confusion for those on the ground. Second, it is likely the courts will view the list of exemptions as limiting due to the simple fact that Congress inserted the list in the bill in the first place. If a specific activity is not listed then it could be reasonably assumed that Congress meant it to be within the jurisdiction of the CWA.

A worse case scenario would be the inability to site and permit new aggregate operations in areas with high growth rates. Considering that 40 percent of aggregate produced is used in road and transportation projects and another 20 percent in public works projects (schools, airports, water and sewer systems, etc.), the unintended consequence of this action would be to drive up the price for construction aggregate, as these basic raw materials needed to sustain the economic growth of an area must be imported from greater distances. This increased cost for new construction will be borne by the taxpayer.

Ultimately, this legislation that is said to provide the regulated community with more certainty will actually require additional permits, longer delays and higher costs for construction projects.

As introduced the Clean Water Restoration Act greatly expands the jurisdiction of the CWA and will have a number of severe impacts on the aggregates community. NSSGA urges Congress to reconsider this legislation and seek input from the regulated community on those areas where we can work together to protect waters and wetlands that truly are important to ecosystems and watersheds and those that provide valuable flood control and water purification.

NSSGA believes the Section 404 program can be improved by:

- Classifying wetlands based on value and function. Wetlands should be classified into three categories on a national, state or regional basis with "strict sequencing" in the high value wetlands; "public interest" (balancing) test in medium value wetlands; and automatic permit with mitigation requirements in lowest value wetlands.

- Developing incentive programs for private landowners to conserve wetlands on their property. Tax credits and other benefits encourage landowners to leave privately owned wetlands in their natural state and to manage such lands accordingly.

NSSGA is proud of the work our members do to protect the environment. By working together, wetlands that are truly valuable can be protected for the benefit of the environment, our nation's waters, and future generations while at the same time our members can continue to provide essential aggregate materials that sustain the quality of life enjoyed by all Americans.

Appendix 1

The NSSGA Board of Directors amended these Environmental Guiding Principles on February 11, 2001. The Environmental Guiding Principles were originally adopted January 20, 1991.

The National Stone, Sand and Gravel Association (NSSGA)

- Encourages its members to meet all established environmental regulatory requirements, and where possible to do better than the law and regulations require.
- Believes that environmental laws and regulations should be based on sound scientific, engineering and medical research and on established scientific, engineering and medical principles. To this end, NSSGA will work with lawmakers and regulators and make available the expertise of its member, staff and research facilities to help in shaping the nation's environmental policies.
- Encourages its members to adopt and implement an Environmental Management System (EMS) program to meet its environmental requirements and improve its overall performance. An EMS is a continual cycle of planning, implementing, reviewing and improving the actions that an organization takes to meet its environmental goals.
- Encourages its members to strive for excellence in environmental affairs and to provide leadership by example by demonstrating environmental stewardship in all aspects of their operations.
- Encourages its members to contribute to environmental enhancement by implementing programs such as landscaping and wildlife habitat development.
- Encourages its members to work with community leaders and citizens groups in developing plans for appropriate uses of the land in the community interest, once mining operations have been completed.
- Encourages its members to participate in communicating to the public the importance to society of an environmentally-responsible aggregate industry, and in educating the youth of our country in the wisdom of responsible environmental stewardship in a business setting.
- Believes that wise environmental stewardship is good business, and good for business.

Appendix 2

National Stone, Sand & Gravel Association's
Guiding Principles for Sustainable Aggregates Operations

The members of the National Stone, Sand and Gravel Association (NSSGA) identifies sustainability as a business approach that integrates environmental, social and economic aspects to ensure the long-term supply of aggregate materials to society. NSSGA recognizes that sustainable practices are necessary today to preserve the potential for a quality life for future generations.

Overarching Practices

- NSSGA members sustain the communities in which we operate by providing raw materials as natural building blocks for quality of life.
- We are conscious of the need to provide economic, social and environmental value for future generations, and the communities in which we operate.
- We demonstrate a strong and unwavering commitment to safety, health and the environment at our operations.
- We work with appropriate government bodies to establish effective, responsible and balanced laws and other requirements based on sound science.
- We encourage life cycle re-use of products during manufacturing and post consumer use.
- We maintain adequate aggregate resources in locations that minimize the life cycle impacts of the resource's extraction, delivery and use.
- We encourage proper land use development and planning within communities to ensure long-term aggregate resource availability.
- We adhere to the highest ethical business practices and transparency in all aspects of our operations.
- We recognize that profitability is essential to a sustainable industry and its continued ability to contribute to communities.

During the Mining Life Cycle of an aggregate operation, our members are encouraged to:

Planning Phase

- Develop a site-specific plan for post mining land use and/or reclamation that engages stakeholders in planning for future needs and interests.
- Plan for the prevention and/or minimization of environmental impacts.
- Adopt and implement an Environmental Management System program to properly manage potential environmental risks and requirements, and improve overall environmental performance.

Operational and Closure Phase

- Pursue new technologies and practices to improve the operational, safety, health and environmental efficiency of our operations.
- Invest in the personal and professional development of employees to ensure a strong workforce into the future.
- Ensure that employees are treated in a respectful and positive manner, and provide them with competitive compensation programs consistent with performance and industry practice.
- Identify, control and/or eliminate risks associated with occupational injuries and illnesses.
- Encourage employees and contractors to interact responsibly within the community in which we operate and serve.
- Work in partnerships to promote beneficial post-mining land use, including industrial, commercial, and residential and community development, agricultural production, and wildlife conservation, habitat creation and restoration.

TESTIMONY OF

NATIONAL WILDLIFE FEDERATION
DUCKS UNLIMITED
TROUT UNLIMITED
IZAAK WALTON LEAGUE OF AMERICA

SUBMITTED TO THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

ON

THE STATUS OF THE NATION'S WATERS, INCLUDING WETLANDS, UNDER THE JURISDICTION OF THE FEDERAL WATER POLLUTION CONTROL ACT

JULY 19, 2007
RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C.

WHY HUNTERS AND ANGLERS SUPPORT THE CLEAN WATER RESTORATION ACT

The National Wildlife Federation, Ducks Unlimited, Trout Unlimited, and the Izaak Walton League of America represent the interests of millions of Americans who are avid hunters and anglers. The future of our hunting and angling traditions literally hang in the balance unless we can ensure the protection and restoration of our Nation's wetlands, lakes, and streams. Congress must act to restore Clean Water Act jurisdiction to wetlands, lakes, and intermittently flowing streams that are losing protection in the aftermath of recent Supreme Court rulings. The links in the chain are easy to follow: without Congressional action, wetlands, some lakes, and many streams are currently at risk of being destroyed or polluted; without healthy wetlands, lakes, and streams, America's fish and wildlife populations will slowly disappear; without fish and wildlife, millions of American hunters and anglers – and future generations -- will be left with lifeless waters.

"These waters are the lifeblood of the nation's diverse water systems, replenishing water supplies, filtering out pollution, slowing flood waters and providing habitat for fish, birds and other wildlife," explains National Wildlife Federation President Larry Schweiger. "Maintaining and restoring our Nation's wetlands, lakes, and streams for wildlife and for our children's future is of the utmost importance to our members, to our affiliate organizations in 47 states and territories, and to hunters and anglers nationwide." -- excerpt from National Wildlife Federation letter to Congressmen Oberstar, Ehlers, and Dingell, dated May 21, 2007.

In announcing Ducks Unlimited's decision to endorse the Clean Water Restoration Act, Executive Vice President Don Young was adamant in stating: : "without protection of these wetlands, waterfowl in the most important wetlands in North America are at risk. Ducks are at risk, and in fact the future of duck hunting is at risk as well." For over 70 years, DU supporters have committed their personal time and resources to conserve North America's wetlands. DU's research has confirmed that the Prairie Pothole Region is the most important waterfowl production area in the world, and without the wetland and grassland breeding habitats in this region, significant declines in the numbers of ducks in North America would result. –excerpts from Ducks Unlimited letter to Committee Chairman Oberstar, dated May 22, 2007; http://www.ducks.org/Conservation/GovernmentAffairs/3233/CWARText.html.

Trout Unlimited's mission is "to conserve, protect, and restore North America's coldwater fisheries and their watersheds. TU accomplishes this mission through a dedicated and extensive network of over 150,000 volunteers across 450 chapters nationwide. TU is demanding congressional action, recognizing that the future of trout and salmon fisheries, like the future of waterfowl, is bleak absent restoration of Clean Water Act protections to all waters historically protected:

> "The problem is especially acute in the western United States for trout and salmon, where streams which provide spawning and rearing habitat during wet times of the year, may be dry at other times of the year, and thus may be declared non-jurisdictional by

> the regulatory agencies. Once beyond the scope of the Clean Water Act, these waters are at risk of development and destruction." --excerpt from Trout Unlimited letter to Congressmen Oberstar, Ehlers, and Dingell, dated May 22, 2007.

The Izaak Walton League of America, founded by avid anglers in 1922 "to save outdoor America for future generations," is also calling on Congress to restore protections to at risk waters such as non-navigable headwater streams and seasonally dry wetlands:

> Thirty-four million anglers and thirteen million hunters rely on the clean water and healthy fish, birds and other wildlife populations that isolated wetlands support. These sportsmen and women contribute $70 billion a year to the economy. Wetlands are also vital to three-fourths of America's commercial fish production, which is worth $111 billion. If wetlands are left unprotected from agricultural, residential, and commercial development, the economic loss would be staggering.--excerpt from Izaak Walton League of America letter to Congressmen Oberstar, Ehlers, and Dingell, dated May 21, 2007.

THE ROLLBACK OF CLEAN WATER ACT PROTECTIONS

In 1972, Congress passed the Clean Water Act (CWA) to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The Act seeks to protect the integrity of the entire aquatic ecosystem, including important headwater streams and remote wetlands. Congress must act to restore Clean Water Act protections to waters at risk of losing protection in light of two recent split decisions of the U.S. Supreme Court: *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers* (*SWANCC*), issued in 2001, and *Rapanos v. United States* issued in 2006.

EPA and the Corps responded to each decision with "guidance" that went even further than the decisions themselves in rolling back Clean Water Act protections. In 2003, the Corps and EPA interpreted the narrow *SWANCC* decision very broadly, directing Corps field offices not to assert jurisdiction over geographically separated waters like prairie potholes, playa lakes, and other wetlands. Then in June, in a long-delayed attempt to clarify the very confusing *Rapanos* decision, the Administration issued guidance that has been variously described as convoluted, unworkable, and even harmful.. For many non-navigable waters and wetlands, the Rapanos guidance relies on a case-by-case evaluation that promises to be time intensive and not protective. In the end, it leaves key questions unanswered, and fails to provide a workable and protective framework for safeguarding waters.

After the *SWANCC* decision, important wetland areas that were protected for over 30 years have had their federal Clean Water Act protections inappropriately removed. And, as a result of these confusing decisions and subsequent narrow guidance interpreting them, we now have more doubt where there once was more certainty. Consequently, an immense number of wetlands and streams are at risk.

HUNTERS AND ANGLERS DEPEND ON HEALTHY WETLANDS, LAKES AND STREAMS

Waters most at risk from the *Rapanos* and *SWANCC* decisions are small, headwater streams, other intermittently flowing streams, wetlands associated with such streams, and geographically separated wetlands like prairie potholes, playa lakes, and vernal pools. Far from being "isolated" or "remote" waters, these waters are in fact the life blood of larger waters and some of the most vital waters to wildlife. Headwater streams, including intermittent streams, storm and snowmelt event streams, and desert streams flowing from springs comprise about three-fourths of the total length of all streams in the United States. EPA has estimated that intermittent or ephemeral streams comprise 59 percent of all stream miles in the United States, excluding Alaska.

Wetlands and headwater streams filter sediment and other pollutants from reaching larger downstream waters, prevent flooding by holding back stormwater, and gradually release stored water during low flow and drought periods. By retaining water during rain and snow melt events, wetlands ensure that water more evenly and slowly flows into downstream waters. This prevents washouts, maintaining the structural nooks and crannies important to the reproduction of certain fish. It also prevents scouring of banks, which can wash nutrients, sediment and other pollutants into streams. By recharging groundwater during dry periods, wetlands also maintain the healthy downstream flows and temperatures that fish and other wildlife depend on.

By contrast, when wetlands are destroyed, streams throughout the aquatic system experience increased flooding due to the loss of water retention upstream. The result is that streams become torrents during storm events, but then quickly dry up. Such unstable conditions harm most fish and wildlife. When these wetlands and headwater streams are polluted and destroyed upstream, the harmful impacts are often amplified in larger waters downstream.

Wetlands and headwater streams provide important habitat for many fish and wildlife species. Many aquatic and semi-aquatic species begin their lives and return to spawn or breed in tributaries and adjacent wetlands. Salmon and trout use headwater streams both to spawn and during their juvenile life stages. Several Great Lakes fish, such as chain pickerel, largemouth bass, smallmouth bass, carp, northern pike, and muskellunge, rely on inland wetlands for spawning and juvenile life stages. Detritus and other biological materials are processed by these waters into compounds edible by macroinvertebrates which are, in turn, important food sources for fish, frogs and other wildlife.

Waterfowl and other wildlife also are highly dependent on wetland habitat. In the two regions discussed below, Clean Water Act rollbacks in response to *SWANCC* and *Rapanos* could be particularly devastating.

The Prairie Pothole Region

The vast Prairie Pothole Region (PPR) is one of the most vital areas in the Nation to wildlife, particularly waterfowl. It covers about 347,500 square miles, including portions of Iowa, Minnesota, Montana, North Dakota, and South Dakota, along with areas of Canada. Potholes are relatively small, shallow wetlands that often vary in their ability to retain water, with many being seasonal. Historically, the area may have supported more than 49 million acres of wetlands, but more than half of those already have been lost in the United States portion of the PPR, and over 70% of the PPR wetlands in Canada have been drained or altered. Though the PPR is dense with wetlands, many lack a surface water connection to other waters. As a result, prairie potholes have lost protection under the CWA because of *SWANCC, Rapanos,* and the consequent agency guidance.

The PPR is the producer of at least half of America's waterfowl. North Dakota alone has an estimated 1,208,500 acres of wetlands of high or moderate habitat value to waterfowl. A sampling of species that nest in potholes includes the mallard, blue-winged teal, northern pintail, northern shoveler, canvasback, gadwall, ruddy duck and Canada goose.

Potholes also impact the chemical and physical well-being of entire aquatic ecosystems. The flood storage capacity of potholes has also been shown to be large. Studies have indicated that the depressions in the Devils Lake basin in North Dakota could retain as much as 72% of the total runoff in a 2-year frequency runoff event and 41% of the total runoff from a 100 year-frequency runoff event. Devils Lake, due in large part to wetlands drainage, has experienced extensive flooding that has caused serious economic loss in the area. Studies have also found that potholes can recharge groundwater, and can supply water to discharge sites up to 16 miles away. Pothole wetlands have additionally been shown to be extremely effective in removing nutrients from water that might otherwise drain into other waters. Moreover, studies indicate that temporary and seasonal wetlands that do not routinely flow into other waters are especially effective in nutrient removal. Pollutant removal is of particular importance in the PPR due to the great deal of agriculture in the area. Yet many of these vital functions may be lost if Congress does not clearly restore federal safeguards to these important waters.

The Dry Southwest

The arid desert landscape defines the southwestern United States. However, the streams, springs, seasonal wetlands, playas, and rivers that speckle the region teem with life, and these waters are the lifeblood of its human and wildlife populations. The very fact that water covers so little of the land base in this region makes protection of these waters even more critical to the maintenance of a healthy ecosystem. However, the intermittent nature of many of these waters renders them at peril. A few examples to consider:

- "Closed watersheds." These are watershed areas where water leaves the basin only through groundwater or evaporation. They are common in the hot and dry Southwest. For example, approximately 20% of the watersheds of New Mexico and two-thirds of

Nevada's basins are in closed basins. In New Mexico, closed basins contain more than 84 miles of perennial waters and 3,900 miles of intermittent waters—these waters comprise over 14% of the waters in the State.

- The New Mexico Department of Fish and Game has concluded that because New Mexico is an arid state, the loss of any of these intermittent or geographically separated waters to development or water pollution could adversely affect the persistence of wildlife populations in these arid areas. This region can afford no more resource losses. Already, the numbers of waterfowl wintering in the state have been in decline, at least partially as a result of shrinking water supplies in lakes and rivers from severe drought.

- Arizona alone contains 122,525 miles of ephemeral or intermittent waters—96% of all watercourses in the state. Similarly, only 0.9% of Nevada's total land area is wetland or open water, and more than half of the wetlands in the state are playas (small, round depressions in the ground that fill with water) that are losing CWA protection in the wake of the *SWANCC* and *Rapanos* decisions.

- The Ruby Lake National Wildlife Refuge in northeast Nevada is an oasis of life in this dry region. The refuge has the highest canvasback duck nesting density of anywhere in North America, and more than 60 species of birds nest or migrate through the refuge. It was also once considered one of the ten best large mouth bass fisheries in the country. This closed watershed receives water from over 150 springs at the base of the Ruby Mountain range that borders the refuge. However, these springs may now be considered isolated and non-jurisdictional.

- On the Texas panhandle alone, there are almost 20,000 playa lakes encompassing 200,000 acres. The Texas Parks and Wildlife Department estimates that between 30,000 and 500,000 waterfowl winter on the Texas playas. The Corps of Engineers, under current regulatory practice, considers many playa lakes as "isolated" waters outside its jurisdiction.

THE NEED FOR CONGRESSIONAL ACTION

Congress must act to restore the protections that existed prior to the *SWANCC* ruling in 2001. This conclusion is highlighted by the Corps and EPA's recently issued guidance discussed above, which presents a confusing and unworkable framework and demonstrates that an administrative solution is not a viable option. Without legislative repair, the *Rapanos* and *SWANCC* decisions will leave the protection of many waters in doubt as the Corps struggles through jurisdictional determinations on a cumbersome case-by-case basis and courts create a patchwork of judicial guidance that will likely jeopardize the health of our waters.

H.R. 2421 offers a simple fix by providing a clear statement of congressional intent to restore the Clean Water Act protections that existed prior to the *SWANCC* ruling in 2001. The bill removes the words "navigable waters" that were given such a narrow construction by the Supreme Court, and substitutes the words "waters of the United States" – the term Congress used in the Clean Water Act to define "navigable waters." The bill then defines "waters of the United States" in a manner nearly identical to the definition promulgated in rule and used by the Corps and EPA for over 30 years. Finally, the bill includes findings that emphasize the economic and ecological importance of wetlands, intermittently flowing streams, and other intrastate waters put at risk by the recent Supreme Court rulings, the economic activities that threaten them, and the constitutional basis for protecting them.

We thank the Committee for the opportunity to provide this testimony and respectfully request that this testimony be entered into the hearing record.

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The Nationwide Public Projects Coalition

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Statement for the Record of Hearing on Status of the Nation's Waters, Including Wetlands, Under the Jurisdiction of the Federal Water Pollution Control Act

July 19, 2007

Committee on Transportation and Infrastructure,
Subcommittee on Water Resources and Environment

Chairman Oberstar, Ranking Member Mica, Committee Members:

Thank you for providing an opportunity for persons and organizations that could not testify as witnesses at the hearing to present their views in the form of statements for the record.

The Nationwide Public Projects Coalition (NPPC) was formed 17 years ago to present the case for reforms and improvements of the Federal Water Pollution Control Act (FWPCA) and other environmental protection laws and regulations from the vantage point of state and local public agencies that provide services to citizens of the nation. NPPC's members are cities, counties, water and wastewater districts, flood control and drainage districts, and highway agencies that build and maintain public infrastructure. Its symbol is a simple balance like the one that traditionally depicts Justice in our nation. The phrase "Environmental Values" is on one side of the scale. On the other side is "Needs of People."

Our mission is to do what we can to help re-balance environmental laws and regulations, plus laws devised by judges rather than legislators that seem to ignore the original intents of the framers of FWPCA, the Clean Water Act (CWA) that followed, plus the Endangered Species Act (ESA).

For example, NPPC has entered amicus curiae briefs in such high profile CWA related litigation as *Solid Waste Association of Northern Cook County v U.S. Army Corps of Engineers (SWANCC)* and, more recently, *John A. Rapanos, et al, v .U.S. Army Corps of Engineers.*

Our statement will be brief, recognizing that witnesses on July 19 addressed in considerable depth the wide-ranging topics suggested by the hearing's title. We will comment only on what we feel are some potential unintended consequences of the House bill with the short title of the "Clean Water Restoration Act of 2007," H.R. 2421.

A major thrust of that bill is to excise the term "Navigable Waters" wherever it appears in FWPCA and ESA and replace it with "Waters of the United States."

We acknowledge that the term has become muddied in the years since it was used repeatedly, and clearly purposefully, in the Clean Water Act of 1972. At that time the term was well understood and had been quite serviceable in application by Federal regulatory agencies, particularly the U.S. Army Corps of Engineers, for nearly a century.

In fact, "Navigable Waters of the U.S.," applicable to the Corps under *33 CFR, Part 329,* was defined simply as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce."

But, in the decades that have followed, Federal agency rulemaking and practices in the field have stretched the meaning of "Navigable Waters" almost beyond recognition. Usually that license has been in the national interest, but in our view the result too often has been delay or thwarting of important public infrastructure projects with little or no benefit to environmental quality or other needs of people.

The definition of "Waters of the United States" in Section 4 of H.R. 2421 includes not only the historic language of *33 CFR, Part 329,"* but also "all interstate and intrastate waters and their tributaries," followed by a laundry list of places that always, occasionally or very rarely are wet. It would seem to define every drop of precipitation that falls anywhere in the nation as "Waters of the United States." We feel that, should H.R. 2421 become law as presently written, a whole new era of regulatory excess and litigation will be ushered in.

NPPC's public sector members would vastly prefer that such additional Federal and local government agencies' workloads – and expenditures of public funds --instead be used to provide tangible benefits to our constituents ranging from lower taxes to reasonable and practicable environmental protection, and improved delivery of essential services.

We would urge the Committee to take a step back and find ways to bring the requirements and constraints of "Navigable Waters" into the realities of the 21st Century without opening the floodgates of regulatory excess and litigation that would attend H.R. 2421's new meaning of "Waters of the United States."

Thank you.

North American
Benthological Society

July 12, 2007

United States Representative James L. Oberstar, Chair
House Committee on Transportation and Infrastructure

United State Representative John L. Mica, Ranking Member
House Committee on Transportation and Infrastructure

Dear Representatives Oberstar and Mica,

I am submitting this letter in support of H.R. 2421 (Clean Water Restoration Act) on behalf of the North American Benthological Society (NABS), of which I am the President. NABS is a scientific society with more than 1600 members whose research and professional activities focus on the physical, chemical, and biological structure and function of rivers and streams and other shallow-water ecosystems. The policy of NABS is to promote and advocate the use of the best available science for decision-making related to freshwater ecosystems and to communicate this science as necessary to inform the public, environmental managers, and decision-makers. It is the considered opinion of this Society, as approved by the executive committee, that the Clean Water Restoration Act provides a more scientifically defensible approach to the protection of water quality in the US than current legislation for the reasons set out below.

Scientific evidence, much of it produced by members of our Society, has clearly shown that non-navigable rivers and headwater streams, including ephemeral, intermittent, and small perennial streams, as well as lakes, wetlands, and ground waters associated with these waters, are an integral part of the ecological quality of entire river networks. Although some small water bodies and ground waters may not have a visible hydrologic connection to a navigable water body during all months of the year, they directly regulate the physical, chemical, and biological integrity of all navigable rivers. The Clean Water Act, as it is presently being interpreted, does not adequately provide for the protection of these systems.

Research by members of our Society shows that headwater streams have intrinsic value themselves by virtue of their unique physical, chemical and biological conditions and functions. Our research also shows that:

- affect the physical integrity of larger rivers by controlling rates of runoff and sediment delivery;

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- affect downstream chemical integrity by their capacity for nutrient and contaminant uptake, retention, transformation, and transport;
- affect the biological integrity of navigable rivers by providing food resources, thermal refuges, spawning sites, nursery areas, and habitat for unique biota;
- are the most extensive and most poorly quantified types of streams; and
- are profoundly altered by human activities, to the detriment of downstream water bodies and the public interest.

Again, on the basis of over a century of scientific research, it is axiomatic that ephemeral, intermittent, and small perennial headwater streams, in addition to non-navigable rivers, lakes, ponds, ground waters, and the wetlands associated with them, are critical to the chemical, physical and biological integrity of navigable waterways. Because of their extent and function, these waters are of collective importance to the integrity of navigable rivers; not protecting these waters under the auspices of the Clean Water Act is detrimental to interstate commerce and public interests that depend on water quality and water flows. Based on these facts, it is our judgment that the Clean Water Restoration Act (H.R. 2421), by clarifying the jurisdictional authority of the Clean Water Act over all of the nation's waters, provides a more scientifically defensible basis for protecting water quality than leaving the jurisdictional authority of these systems to the existing language.

Sincerely,

R. Jan Stevens

R. Jan Stevenson, Ph.D.
President, North American Benthological Society
Department of Zoology
203 Natural Science Building
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cc: Hon. Eddie Bernice Johnson, Chairwoman, Subcommittee on Water Resources and Environment, House Committee on Transportation and Infrastructure;
Hon. Nancy Pelosi, Speaker, United States House of Representatives;
Stephen Johnson, Administrator, United States Environmental Protection Agency;
Benjamin Grumbles, Assistant Administrator, Office of Water, United States Environmental Protection Agency

RUSSELL E. TRAIN
1801 KALORAMA SQUARE, N.W.
WASHINGTON, D. C. 20008

July 17, 2007

The Honorable James L. Oberstar
Chairman, House Committee on Transportation and Infrastructure
2165 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Oberstar:

I am pleased to endorse H.R. 2421, the Clean Water Restoration Act of 2007.

As you know, I served as Chairman of the Council on Environmental Quality when the law now known as the Clean Water Act was enacted by Congress in 1972, and subsequently as Administrator of the U.S. Environmental Protection Agency in 1973, the same year EPA adopted regulations defining "waters of the United States" pursuant to the Clean Water Act. Since that time and until the 2001 Supreme Court decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, an unbroken line of EPA Administrators of both parties has implemented the Clean Water Act to protect *ALL* waters of the United States, including so-called "isolated" waters, as well as tributaries and adjacent wetlands like those involved in the most recent Supreme Court case, *Rapanos v. United States.*

In the three decades since the Clean Water Act's passage, EPA and regulatory agencies have consistently interpreted the term "navigable waters" to cover all waters of the United States, including non-navigable tributaries and wetlands. The term at issue here – "waters of the United States" – is the basis for every water pollution control program established under the Clean Water Act, not just the wetlands permit program. The success of the Clean Water Act is due in large measure to its broad coverage of all waters of the United States. This has been possible because of the longstanding, bi-partisan support the Clean Water Act has received since it was first passed.

In hearings before the Committee on Public Works in July of 1976, I testified about the early years of implementing the Federal Water Pollution Control Act Amendments of 1972. Although the main thrust of the hearing was Section 404 of the Clean Water Act, I did at that time testify about the concept of "broad jurisdiction over water." I would like to underscore and reaffirm the importance of that concept.

A fundamental element of the Clean Water Act is broad jurisdiction over water for pollution control purposes. It has been well-established that water moves in interrelated and interdependent hydrologic cycles and it is therefore essential that pollutants be controlled at their source to prevent contamination of downstream waters. When focusing on controlling pollution, navigable waters, portions of those waters, their tributaries, and wetlands – all must be included in the scope of protected waters.

If we did not protect these streams, creeks, and wetlands, the course of abating pollution in this country would be much more difficult and more expensive because of the additional costs of technological fixes that would be necessary in the absence of what nature has provided. And, thus, in my view, comprehensive jurisdiction for the Clean Water Act is essential for the protection of the aquatic environment. Simply put, we cannot protect and restore our nation's water resources without providing appropriate safeguards for the entire resource.

Comprehensive jurisdiction is necessary to protect the natural environment. It is also important to avoid unfair competition. Unless federal jurisdiction is uniformly implemented for all waters, discharges located on non-navigable tributaries upstream from larger rivers, lakes and other water bodies would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors. Artificially limiting jurisdiction to only certain waters will create competitive disadvantage for certain dischargers.

For these and other reasons the early implementers of the Clean Water Act – those of us in the Nixon and Ford administrations – fully embraced Congress's broad assertion of authority in 1972 and opposed legislative and regulatory efforts to dilute and diminish the scope of the law.

The Clean Water Act was a bipartisan, commonsense approach to addressing the water pollution problems our nation faced in the years before the Act was passed. We cannot afford to go backwards, to undo progress made over more than 30 years. The decisions Congress makes today in this regard will determine what future generations will inherit.

I might add in closing that I have enjoyed a long career in conservation. I have seen firsthand the degradation of natural resources and the economic and other consequences that follow. I have also been privileged to play a part in reversing this situation and promoting environmental stewardship in this country and abroad. I can assure you that should Congress fail to act, leaving in place what is essentially a dual class of waters and wetlands, those not subject to Clean Water Act jurisdiction will be lost at an accelerated rate. The consequences will be tragic, not just for the wildlife that depend on these resources, but for all of us, for it is on the health and productivity of these very resources that all human activity depends, including economic activity.

Thank you for your leadership, Mr. Chairman. I applaud your efforts and those of your Committee colleagues to ensure that jurisdiction extends to all waters of the United States to the broadest extent possible by enacting the Clean Water Authority Restoration Act of 2007.

Sincerely,

Russell E. Train

Russell E. Train
Administrator, U.S. Environmental Protection
Agency, 1973-1976

cc: The Honorable John Mica

WILLIAM K. REILLY

July 6, 2007

The Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
Rayburn House Office Building 2165
Washington, DC 20515

Dear Chairman Oberstar:

Three cheers for your initiative to make clear that federal jurisdiction extends to all wetlands in the United States. I whole heartedly support the Clean Water Restoration Act of 2007. This legislation is necessary to reaffirm the jurisdictional scope of the Clean Water Act and restore its implementation to what has been the accepted scope for more than 30 years.

As a former Administrator of the U.S. Environmental Protection Agency, I am pleased to comment on how the Agency has interpreted and implemented the Clean Water Act. I might add that because of the declaration of support by President George H.W. Bush for the national goal of "no net loss" of wetlands – a goal that resulted from the ~~National Wetlands Policy Forum launched by former EPA~~ Administrator Lee Thomas during the latter years of the Reagan Administration – I took wetlands issues very seriously. Our interagency consultations on the delineation manual, constant references in my speeches and public appearances, as well as to our leadership team at the Agency, repeated consultations with Members of Congress, the invocation of 3 actions under section 404c to block development that otherwise would have meant irreparable harm to important wetlands, the threat of additional such actions to force modification of problem proposals – these and more suggest the priority I put on the issue throughout my 4 years at the Agency.

As our country develops, as our population grows and spreads across the landscape into more remote locations, it is incumbent on us to safeguard the health and productivity of the natural resources on which all human activity, economic activity included, depends. Foremost among these resources are the wetlands that filter contaminants, buffer important waterways, provide critical habitat, offer venues for recreation, fishing, and related pursuits, and other benefits. We can ill afford to let down our guard, lest we undermine the very resources on which a growing population depends.

As you know, I joined with three other former EPA Administrators to weigh in on the side of the Administration of President George W. Bush in the Supreme Court case, *Rapanos v. United States,* as to which waters should remain subject to protection under the Clean Water Act. This bipartisan group, including Russell Train, Doug Costle, Carol Browner, and I, have had 20 years of service at EPA among us. And we all share a strong interest in ensuring the continued application of the Federal Water Pollution Control Act of 1972 (Clean Water Act) to all waters of the United States, including tributaries and adjacent wetlands like those involved in the *Rapanos* case.

Charged with implementing the Clean Water Act, EPA has worked closely with the states over the last 30 years to make steady progress in reducing water-borne contamination and restoring the commercial, recreational, and ecological health of our country's aquatic resources. This successful federal-state partnership and the long-settled administrative practices on which it is built should not be weakened by an excessively narrow interpretation of the statute.

Since the Clean Water Act passed, U.S. courts and regulatory agencies have consistently complied with Congress's intent by interpreting the term "navigable waters" to cover all interconnected waters, including non-navigable tributaries and their adjacent wetlands, as well as other waters with ecological, recreational, and commercial values, such as so-called "isolated" wetlands and closed-basin watersheds common in the western United States. This interpretation of the statute's jurisdiction has ensured a robust state-federal partnership.

To move away from this longstanding interpretation toward those suggested in the *Rapanos* case and the earlier Supreme Court decision, *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers ("SWANCC"),* threaten to upend long-settled expectations, hamstring enforcement actions, and harm the ecological, recreational, and commercial values of the nation's lakes, rivers, and coastal estuaries.

The key phrase at issue in these Supreme Court cases – "waters of the United States" – applies to all the water pollution control programs established in the Clean Water Act, not just the wetlands permit program. Perhaps the most important implication of any change to the definition of "waters of the United States" is found by looking at the Act's basic prohibition against discharging pollutants into waters without a permit in the National Pollutant Discharge Elimination System ("NPDES") program established by section 402 of the Act, and the Act's water quality requirements. By using a broad definition of "waters of the United States," Congress recognized the need to address pollution at its source, no matter what size water. In reality there are few isolated waters, indeed many are linked in their hydrology.

Since the Supreme Court's decisions in the *Rapanos* and *SWANCC* cases, the protection of our country's waters under the Clean Water Act has been called into question. No longer are small streams and wetlands, and in some cases larger rivers and lakes, clearly protected by law.

Congress needs to step in to clarify its intent. It is reasonable and sensible to have a broad definition of "waters of the United States" for purposes of the Clean Water Act. The goals of the Act require it. How else can we restore and protect valuable water resources if the only protected waters are those navigable-in-fact? Water and pollutants ~~flow into larger water bodies from smaller ones. We need the~~ commonsense approach that Congress intended in the Clean Water Act to protect our nation's waters broadly so that we can reduce ~~discharges of pollutants and ultimately achieve the goals of the~~ Act – making all waters swimmable, fishable, and safe for other uses.

I endorse the Clean Water Restoration Act of 2007, which you and a bipartisan group of your colleagues, including Representatives Dingell and Ehlers, have introduced. This legislation will reaffirm what Congress intended when it initially passed the Clean Water Act, restore clarity to the law consistent with its longstanding implementation, protect the nation's waters from pollution, and maintain the strong federal-state partnership that has existed under the Clean Water Act for 35 years.

Sincerely yours,

William K. Reilly
Administrator, U.S. Environmental Protection Agency, 1989-1993

MADRONA INVESTMENT GROUP, L.L.C.

July 17, 2007

The Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
Rayburn House Office Building 2165
Washington, DC 20515

Dear Chairman Oberstar:

As the first (and later the fifth) Administrator of the U.S. Environmental Protection Agency, I represented the Administration in the debates over the Federal Water Pollution Control Act amendments of 1972. The Nixon Administration supported a comprehensive federal effort, undertaken in cooperation with the states, to get the nation's severe water pollution problems under social control, and that initial effort has largely been successful. EPA supported a broad definition of "navigable waters" as "waters of the U.S." Like Congress, we recognized that the "chemical, physical, and biological integrity of the Nation's waters" could not be maintained and restored unless pollutants could be controlled at the source, before they enter traditionally navigable waters.

As the head of the EPA at that time, I and my staff were responsible for the implementation and enforcement of the sweeping new law. To faithfully interpret the key jurisdictional term "navigable waters" that Congress had just broadly redefined as "waters of the United States," EPA proposed a regulatory definition of the term "waters of the United States" that included interstate and intrastate waters. In the three decades since the Clean Water Act's passage, EPA has consistently interpreted the term "navigable waters" to cover all "waters of the United States," including non-navigable tributaries and wetlands.

Broad Clean Water Act jurisdiction is not only necessary to clean up the Nation's waters. It is necessary to ensure that the responsibility for maintaining and restoring clean water is shared equitably throughout the watershed and from state to state. In passing the Clean Water Act, Congress recognized that the state-by-state approach to water pollution control had failed, and that it was necessary to maintain a federal "floor" for water pollution control to ensure that discharges in one state do not jeopardize water quality in another.

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It is my understanding you are working on legislation that would create a statutory definition of "waters of the United States" based on the EPA's longstanding regulatory definition. To the extent this legislation, HR 2421, restores – and does not expand -- the jurisdictional scope that existed for over three decades through many administrations, those of both Republicans and Democrats, it will provide a real service for the nation. By focusing strictly on restoring historic jurisdiction, H.R. 2421 can remove the crippling uncertainty, confusion, and delay currently being experienced by the State and federal agencies charged with implementing the Clean Water Act, as well as by the regulated community.

I appreciate your efforts to provide this clarity, and to assure protection of our nation's waters.

Sincerely,

Bill

William D. Ruckelshaus

Robert Perciasepe

July 18, 2007

The Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
Rayburn House Office Building 2165
Washington, DC 20515

Dear Chairman Oberstar:

I am writing today as the Former Assistant Administrator for Water at the Environmental Protection Agency and the former Secretary of Environment for the State of Maryland in strong support for the Clean Water Authority Restoration Act of 2007, HR 2421.

The Clean Water Act is one of the most successful environmental efforts this country has undertaken in the last 40 years. The programs, funding and strong requirements have served the nation well. Our water quality has improved markedly in most parts of the country and in many places treasured water resources have helped revitalize local communities and improved their economies.

However, any realistic assessment of the status of our nation's waters reveals that our recovery efforts have stalled. At best America is "treading water" as it looks to further improve the health of our waters.

The Clean Water Act set out visionary goals to "restore the chemical, physical and biological integrity of the nation's waters". We have not achieved this goal.

The sciences of hydrology and ecology at a minimum, tell us that no water body or water course is separated or "isolated" from the rest. Seemingly "isolated" waters are connected through ground waters or often play key roles in down stream flows during floods. Biologically, the flow of nutrients and organisms connects the ecology of all watersheds from top to bottom. The goals of the Clean Water Act cannot be achieved without considering the whole.

Recent Supreme Court rulings have created confusion with the Act's implementation, while EPA and the Army Corps of Engineers have done very little to correct the confusion. In some cases they may have added to it with ambiguous direction to their field employees.

There is much at stake here and the opportunity to jump start our stalled efforts are in jeopardy without action. Millions of acres of the country's remaining wetland, public drinking water protections especially in some smaller communities, and the management of basic clean water safe guards through the National Pollution Discharge Elimination System which regulates the discharge of pollution into waters.

This is a common sense decision for the Congress. To restore the "integrity" of our waters you have to protect the "whole" not the parts of watersheds. The state agencies delegated the responsibility to set and achieve water quality goals need the consistent federal back stop of authority in their own programs, the federal agencies charged with responsibility under the law need clarity from Congress.

I strongly urge the passage of H.R. 2421 to maintain and keep science in our clean water programs and to bring clarity to the hard working practitioners who struggle to achieve the goals Congress established 35 years ago.

Thank you.

Sincerely,

Bob Perciasepe

Robert Perciasepe,

Assistant Administrator for Water, U.S. Environmental Protection Agency, 1993 – 1997

Maryland Secretary of Environment, 1990-1993

G. Tracy Mehan, III

July 11, 2007

The Honorable James L. Oberstar
House Committee on Transportation and Infrastructure
Rayburn House Office Building 2165
Washington, D.C. 20515

Dear Chairman Oberstar:

I write in support of eliminating the requirement of navigability for defining jurisdiction under the Clean Water Act of 1972 as embodied in H.R. 2421, the Clean Water Restoration Act of 2007.

Mandating navigability as a basis for jurisdiction is inconsistent with the Act's overall objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. It is an artifact of an earlier law, dating back to the 19th century, which was designed to avoid obstacles to waterborne commerce rather than to implement integrated watershed management or environmental protection.

By creating a statutory definition of "waters of the United States" based on the Environmental Protection Agency's longstanding regulatory definition, H.R. 2421 restores the jurisdictional scope of the Clean Water Act which has stood it in good stead for over three decades under both Republican and Democratic administrations.

As a former Assistant Administrator for Water at the U.S. Environmental Protection Agency, Director of the Michigan Office of the Great Lakes, and head of the Missouri Department of Natural Resources, I believe that our unique approach to "environmental federalism" under the Clean Water Act, and a science-based watershed approach to protecting America's aquatic resources, merit congressional action to clarify an extremely confusing and Byzantine situation which now exists in our law and regulations.

Since the *SWANCC* and *Rapanos* decisions, no one is happy with the status quo, least of all state agencies which look to the Clean Water Act as the foundation of their water quality programs. It is well past time for a full, robust, and comprehensive debate on the scope and purposes of the Clean Water Act.

I also applaud the inclusion of a Savings Clause in your proposed legislation which keeps faith with constituencies who have long relied on exemptions for such practices as normal farming, silviculture, and ranching activities under Section 404.

H.R. 2421 will clarify the scope of the Clean Water Act and restore its political legitimacy and scientific integrity.

Thank you for your consideration.

Sincerely,

G. Tracy Mehan, III
Assistant Administrator for Water, U.S. Environmental Protection Agency, 2001-2003

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